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Regulatory Givings and the Anticommons

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The concepts of "takings" and the "tragedy of the commons" are familiar to those versed in the legal and economic literature. Only recently has scholarship begun to emerge around their less studied counterparts, "givings" and "anticommons." For the first time, this Article attempts to develop and bring together these two emerging areas of legal scholarship using the tools of law and economics.

The focus is to explore how these new concepts, taken together, can create a mechanism with which to explore developments in administrative law. The Article first builds a theoretical argument as to how regulatory largesse can subtly create a right for a small number of entities to exclude others, thereby squelching business competition and social diversity. A variety of examples from telecommunications law, local government law, natural resources law, and intellectual property law adds empirical weight to the argument.

Next, the root causes of this phenomenon are explored. Public choice theory and the "public interest" rhetoric, while providing valuable insights, cannot offer a satisfactory explanation. Ideas from transaction cost economics and behavioral economics also shed light on why conventional solutions to the dilemma—grouped around the polarities of "privatization" and "public commons" creation—are inadequate.

The Article concludes by offering an approach with which to reform administrative law. Central to change are reconceptualizations of the "public trust" doctrine, "property" versus "liability" rules, and the public/private distinction.

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I. INTRODUCTION

Virtually every area of administrative law must enable action about how we put our collective resources to use and how we organize ourselves as a society. All too often, however, these decisions have served to abuse resources, squelch competition, and prevent social diversity.

A few examples should capture the gist of what is unfolding. In natural resources law, our magnificent old growth forests are being "ground into pulp to make disposable diapers and cellophane for cigarette packs."[1] In telecommunications law, broadcasting interests have "stolen the free use of great chunks of the most valuable natural resource of the information age: the digital television spectrum owned by the American people."[2] In local government law, gated communities:

> [H]ave taken the unusual step of returning to the medieval method of building walls and denying entrance to all but their residents, employees, and visitors. Access . . . is gained only after a variety of security checks—passing uniformed guards and closed circuit television monitors, displaying an automobile sticker, and showing an identification card.[3]

A stark question emerges: why are these resources squandered and divisive walls built? Despite the urgency of the question, it has received no systematic exploration in the literature. This Article seeks to begin filling that void, and in the process, challenge some commonly held notions about how law is developed and implemented. To do this, it delves into uncharted legal waters, using the emerging tools of law and economics.

Part II of the Article sets the conceptual background. The ideas of "takings" and "tragedy of the commons" are familiar to those versed in the legal and economic literature. However, only recently has scholarship begun to emerge around their less studied counterparts, "givings" and "anticommons." In order to understand how regulatory givings can create an anticommons, both "givings" and "anticommons" need to be developed.

Part III explores how these concepts, taken together, can create a mechanism with which to explore a number of particularly disturbing developments in administrative law. It first builds a theoretical argument as to how regulatory largesse can subtly create a right for a small number of entities (be they natural persons or corporations) to exclude others, thereby squelching business

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[1] Perri Knize, *The Mismanagement of the National Forests*, THE ATLANTIC MONTHLY, Oct. 1991, at 98, 100.

[2] William Safire, *Spectrum Squatters*, N.Y. TIMES, Oct. 9, 2000, at A21.

[3] KENNETH T. JACKSON, CRABGRASS FRONTIER: THE SUBURBINAZATION OF THE UNITED STATES 301 (1985).

competition and social diversity. Next, a variety of examples from telecommunications law, intellectual property law, natural resources law, and local government law, adds empirical weight to the argument.

Part IV delves into the root causes to ask: why do we allow regulatory givings to create an anticommons? Public choice theory and the "public interest" rhetoric—while providing valuable insights into what can go wrong—do not offer a complete solution to the dilemma. Part V displays the conventional response to regulatory problems as belonging to one of two polarities. On the one hand, some espouse privatization of resources and decision-making; others frame their insights around notions of a shared public "commons." Unfortunately, neither notion withstands critical inquiry.

The privatization argument, built around the notion that private actors should be free to bargain among themselves, simply misunderstands economic reality. Notably, it does not pay adequate attention to transaction and enforcement costs, behavioral biases, or even equitable distribution of resources. The commons argument, while intellectually elegant and seductive, is presently unworkable given the realities of technology and human behavior.

Finally, Part VI attempts to propose some provocative solutions. While public and judicial oversight are necessary, the key lies in reconceptualizing the anticommons problem as one that is central to administrative law. A panoply of tools can be reconceived and pressed into service—including redefinitions of the "public trust" doctrine, the impact of "property" versus "liability" rules, and the public/private distinction. Each can contribute to preventing unjustified regulatory givings.

A few caveats are in order before beginning. The first is that the Article necessarily delves into new legal waters and is therefore merely a start. While both descriptive and normative in its ambition, it cannot possibly offer a definitive, or even complete, exposition of its complex themes. It is designed as much to highlight the most promising areas for future research. The second, and most important, is to emphasize upfront the piece's bias; namely, that competitive markets and a diverse society are positive goods. If the reader is sympathetic to these notions, then the Article can serve as a roadmap as to how to improve our lot. If, on the other hand, the reader does not find this point of view palatable,[4] then she can at least take comfort that she is in clever company: the Article must necessarily explore the sophisticated arguments used to subvert competition and social diversity.

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[4] For example, by contending that markets should consist of incumbents in monopoly positions, or that housing segregation is rational.

II. CONCEPTUAL UNDERPINNINGS

A. *Takings and Givings*

The takings jurisprudence, based on the Takings Clause of the Fifth Amendment to the United States Constitution,[5] essentially grapples with the question of when government must provide compensation for "taking" property from a private party. Since physical incursions on property are considered "takings" under modern jurisprudence,[6] the current debate revolves around which regulatory changes constitute "takings."[7] The takings literature is robust and familiar.[8]

In marked contrast, "givings" are understudied. Though not labeled as such, perhaps the first exploration was in Charles Reich's classic law review article, *The New Property*.[9] Reich is primarily focused on how legal mechanisms such as due process can help transform government largesse into rights for the individual.[10] In passing, he does, however, broach the subject of how government can bestow rights on businesses:

> A franchise . . . is a partial monopoly created and handed out by government. Its value depends largely on governmental power; by limiting the number of franchises, government can make them extremely remunerative. . . . A television channel, handed out free, can often be sold for many millions. Government distributes wealth when it dispenses route permits to truckers, charters to bus lines, routes to air carriers, certificates to oil and gas pipelines, licenses to liquor stores, allotments to growers of cotton or wheat, and concessions in national parks.[11]

Despite Reich's insight, the subject of "givings" remained dormant for nearly thirty years. Thankfully, Abraham Bell and Gideon Parchomovsky, noting that "givings play at least as prominent a role in public life as takings and, quite likely,

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[5] "[N]or shall private property be taken for public use, without just compensation." U.S. CONST. amend. V.

[6] *See, e.g.*, Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419 (1982).

[7] *See, e.g.*, Lucas v. S.C. Coastal Council, 505 U.S. 1003 (1992). Note that the idea of a regulatory taking is not new and dates back to Justice Holmes' opinion in *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393 (1922). *See also* Penn Cent. Transp. Co. v. New York City, 438 U.S. 104 (1978).

[8] For an overview of the takings literature, see Abraham Bell & Gideon Parchomovsky, *Givings*, 111 YALE L.J. 547, 558–62 (2001).

[9] Charles A. Reich, *The New Property*, 73 YALE L.J. 733 (1964).

[10] *See id.* at 785 ("The proposals discussed above, however salutary, are by themselves far from adequate to assure the status of individual man with respect to largess.").

[11] *Id.* at 735. The broadcasting issue will be dealt with in depth, *infra* Part III.B.1.

an even greater role,"[12] began rectifying the "near complete absence of givings scholarship."[13] Their article, primarily concerned with exploring the duality of takings and givings and a taxonomy of givings, very broadly defines givings as "government distribution of property."[14] More specifically, they conclude that a regulatory giving "occurs when a government enhancement of property value by means of regulation goes 'too far.' "[15] Building on this definition, for our purposes, a regulatory giving occurs when by means of regulation[16] the government bestows a disproportionate benefit on a class of private actors.[17]

There are two features of a regulatory giving that make it pernicious. The first is that it is subtle in that it does not directly bestow property, thereby making it often difficult to identify and monitor.[18] The second is that unlike a taking—which is vivid in government's seizing of property—a giving appears more benign on the surface. After all, one might argue, government is actually working to help, not hurt someone. The reality, however, is quite different. As Bell and Parchomovsky observe, "[i]n a giving, a small group is able to force the public as a whole to subsidize the group's preferential treatment."[19] Charles Reich presciently sounded off the alarm bell when he noted that "the apparatus of governmental power may be utilized by private interests in their conflicts with other interests, and thus the tools of government power become private rather than public instrumentalities."[20]

It is precisely on this danger that this Article focuses. More specifically, that regulatory givings have the potential of creating an anticommons. But the concept

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[12] Bell & Parchomovsky, *supra* note 8, at 574.

[13] *Id.* Note that while there are other references in the literature, none deal squarely with the issue of givings. *See id.* at 549 n.3.

[14] *Id.* at 549.

[15] *Id.* at 563. The other two categories in their taxonomy of givings are a physical giving where "the government bestows a property interest upon a private actor" and a derivative giving when "as a result of government giving or taking, surrounding property increases in value even though no direct giving has occurred." *Id.*

[16] This most obviously occurs when an administrative agency acts, though it could occur if Congress is acting directly in a regulatory capacity or indirectly via an enabling statute.

[17] Note that this tracks Bell and Parchomovsky's definition closely. The critical concept is that a regulatory giving, unlike a physical giving, does not involve bestowal of a simple property interest. Paradoxically, it is this feature that can make a regulatory giving so dangerous. *See infra* Part III.

[18] *See infra* Part II.B.

[19] Bell & Parchomovsky, *supra* note 8, at 554; *see also id.* at 564 ("Overlooking givings may cause a massive misallocation of resources, impose an enormous cost on the public, and create opportunities and incentives for political mischief.").

[20] Reich, *supra* note 9, at 764. For a discussion of the manipulability of the public/private distinction, see *infra* Part VI.C.2.

of an anticommons, another ignored area in the literature, needs to be explored in its own right.

B. *Commons and Anticommons*

The "tragedy of the commons," like takings, is familiar. Garrett Hardin popularized the concept by opining that communal use of resources is doomed to failure, since each individual will have an incentive to freeload and use up incrementally more of the resource, until resources are overextended.[21] Bizarrely enough, this portion of Hardin's essay has been embraced as gospel, even though Hardin offers scant evidence to back up his point.[22] In fact, there is significant empirical evidence that a regulated commons can function effectively.[23]

Harold Demsetz has offered a more satisfying critique of the commons by focusing on the concept of externality.[24] Beginning with the notion that property rights serve as a mechanism to internalize costs,[25] Demsetz theorizes that a commons:

> [F]ails to concentrate the cost associated with any person's exercise of his communal right on that person. If a person seeks to maximize the value of his communal rights, he will tend to overhunt and overwork the land because some of the costs of his doing so are borne by others.[26]

On the other hand, the notion of anticommons, like that of givings, is unfamiliar. Given the importance of the anticommons to the remainder of the argument, and the fact that it is a counterintuitive creature, it is worthwhile to develop the concept in some detail.

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[21] *See* Garrett Hardin, *The Tragedy of the Commons*, 162 SCI. 1243, 1244–45 (1968). Hardin goes on to note that "the commons, if justifiable at all, is justifiable only under conditions of low-population density." *Id.* at 1248.

[22] Indeed, he is perhaps using this concept as a rhetorical tool to further the disturbing argument that consumes the bulk of his essay—namely, that of restricting the freedom of individuals to breed. *See id.* at 1248 ("No technical solution can rescue us from the misery of overpopulation. Freedom to breed will bring ruin to all."). Hardin goes so far as to "deny the validity of the Universal Declaration of Human Rights" and even suggests that individuals should be coerced into not breeding. *See id.* at 1246–47.

[23] *See infra* notes 302–06.

[24] *See* Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 355 (1967).

[25] *See id.* at 350.

[26] *Id.* at 354. He also observes that a commons overweighs the needs of the current generation, while underweighing those of future generations. *See id.* at 355.

Strangely enough, anticommons can be traced backed to a theoretical article by Wesley Hohfeld.[27] Hohfeld tries to frame his analysis of property in terms of what he terms "jural correlatives."[28] More specifically, right is defined as a correlative of duty: "if X has a *right* against Y that he shall stay off the former's land, the correlative (and equivalent) is that Y is under a *duty* toward X to stay off the place."[29] Similarly, privilege was defined as a correlative of no right:

> [W]hereas X has a *right* or *claim* that Y, the other man, should stay off the land, he himself has the *privilege* of entering on the land; or, in equivalent words, X does not have a duty to stay off. . . . [Thus] the correlative of X's privilege of entering himself is manifestly Y's "no-right" that X shall not enter.[30]

The latter set of correlatives are analogous to a commons; namely, I have the *privilege* of walking on the sidewalk, and you have *no right* to tell me not to. The former, on the other hand, create an anticommons; namely, if you have a *right* to prevent me from hiking in the national forest, then I have a *duty* to stay off it. Note that you do not necessarily need to have a property interest in the forest; you merely need to have some right to exclude me.

In their critique of the presumptive efficiency of private property, Duncan Kennedy and Frank Michelman further developed the concept. They defined a state of nature (SON) where "every person is free to do or take whatever she can with whatever strength and cunning she has."[31] At the other extreme, exists a world owned in common (WOC) where "no one can do or use anything . . . without the consent of everyone else."[32] SON is thus an order where each person holds privileges; WOC, where each person holds rights.[33] Though they did not label them as such, SON is effectively a commons; WOC, an anticommons. In a later article, Michelman further noted that authorization required under WOC could vary from "near-simultaneous unanimous consent . . . [to] expressions of consent from any two persons occurring within the same twelve-month time span."[34]

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[27] Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16 (1913).

[28] *Id.* at 30.

[29] *Id.* at 32 (emphasis added). Hohfeld points out that "claim" would be a good synonym for "right" in this context. *See id.*

[30] *Id.* at 32–33.

[31] Duncan Kennedy & Frank Michelman, *Are Property and Contract Efficient?*, 8 HOFSTRA L. REV. 711, 750 (1980).

[32] *Id.*

[33] *See id.* at 754.

[34] Frank I. Michelman, *Ethics, Economics, and the Law of Property*, *in* ETHICS, ECONOMICS, AND THE LAW 6 (J. Roland Pennock & John W. Chapman eds., 1982). Note that in

Very little was done to further these insights for nearly the next thirty years.[35] This hiatus changed with Michael Heller's insightful analysis of how anticommons have created underutilized resources in post-communist Russia.[36] Heller defines anticommons as a "property regime in which multiple owners hold effective rights of exclusion in a scarce resource."[37] More importantly, Heller observes that to create an anticommons one does not need to give away the traditional "bundle of rights" commonly associated with property.[38] Rather, an anticommons emerges when different owners hold different rights within the bundle, "with no hierarchy among these owners' rights or clear rules for conflict resolution."[39] In other words, the precise definition of rights can be somewhat fuzzy.[40]

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this article, Michelman renames WOC as REG, or regulatory regime. *See id.* Presumably, this was done to avoid the confusing use of the term "common" in WOC, even though WOC is really an anticommons.

[35] Much like the prolonged vacuum in givings scholarship. *See supra* Part II.A.

[36] *See* Michael A. Heller, *The Tragedy of the Anticommons: Property in the Transition from Marx to Markets*, 111 HARV. L. REV. 621 (1998).

[37] *Id.* at 668 (emphasis omitted).

[38] *See id.* at 670. For a classic exposition on what constitutes property, see A.M. Honoré, *Ownership*, *in* OXFORD ESSAYS IN JURISPRUDENCE 107 (A.G. Guest ed., 1961). Honoré first provisionally defines property as the "*greatest possible interest in a thing which a mature system of law recognizes.*" *Id.* at 108. He then highlights eleven incidents of ownership, not all of which necessarily need be present for someone to be called an "owner":

(1) The right to possess

(2) The right to use

(3) The right to manage

(4) The right to the income

(5) The right to the capital

(6) The right to security

(7) The incident of transmissibility

(8) The incident of absence of term

(9) The prohibition of harmful use

(10) Liability to execution

(11) Residuary character

See id. at 112–28 (listing and explaining the above subheadings).

[39] Heller, *supra* note 36, at 670.

[40] Heller goes on to note that such problems emerge when governments create new rights, as they did after the fall of the Soviet Union. *See id.* at 679; *see also* Keith Aoki, *Sovereignty and the Globalization of Intellectual Property: Neocolonialism, Anticommons Property, and Biopiracy in the (Not-So-Brave) New World Order of International Intellectual Property Protection*, 6 IND. J. GLOBAL LEGAL STUD. 11, 35 (1998) ("[T]here is a point where too many property rights owned by too many parties creates a legal 'smog,' that is, an anticommons.").

I am primarily concerned with Heller's latter observation; in other words, I define "anticommons" as a legal regime where the Hohfeldian right to exclude is created without granting the "bundle of rights" that constitutes property. This, in turn, creates underutilization of resources. Of course, the degree of underutilization may be proportional to the number of people who hold exclusion rights,[41] but this is not my focus. The touchstone is thus exclusion creating underutilization, not the number of people who hold rights to exclude—after all, one person is enough to create a holdout.[42]

This definition is closer to Michelman's original exposition,[43] and in line with recent law and economics scholarship.[44] Though perhaps less precise than Heller's carefully crafted parameters, it is arguably of broader applicability.[45]

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[41] *See, e.g.*, James M. Buchanan & Yong J. Yoon, *Symmetric Tragedies: Commons and Anticommons*, 43 J.L. & ECON. 1, 5 (2000) ("The wastage of value will be a function of the number of decision-making units that are assigned rights to exclude users.").

[42] The concept of holdout has been usefully linked to the anticommons. For example, John Armour and Michael Whincop have noted that the majoritarian processes of bankruptcy law are designed to circumvent anticommons problems. *See* John Armour & Michael J. Whincop, *Unincorporated Business Entities: An Economic Analysis of Shared Property in Partnership and Close Corporations Law*, 26 J. CORP. L. 983, 999 (2001) ("During the firm's solvency, it makes sense for creditors to be able to exercise their rights unilaterally, but once they become residual claimants this gives rise to severe hold-up or anticommons problems.").

[43] Heller refines Michelman's model apparently because he interprets it as one in which "no one is privileged to use objects and everyone has the right to exclude." Heller, *supra* note 36, at 667. But Michelman can be read more broadly to encompass a continuum of exclusion mechanisms. *See supra* note 34.

[44] For example, Buchanan and Yoon have created a model to show the mathematical symmetry between the commons and the anticommons. *See* Buchanan & Yoon, *supra* note 41, at 1. They consider anticommons a "useful metaphor for understanding how and why potential economic value may disappear into the 'black hole' of *resource underutilization*, a wastage that may be quantitatively comparable to the *overutilization wastage employed in the conventional commons logic*." *Id.* at 2 (emphasis added).

[45] Note that Heller has convincingly extended his anticommons definition to land co-ownership and patents. *See* Hanoch Dagan & Michael A. Heller, *The Liberal Commons*, 110 YALE L.J. 549, 614 (2001) ("Absent partition, the veto power each commoner enjoys leads to a tragedy of the anticommons, with wasteful underuse and eventual division, as suggested by the black landownership saga."); Michael A. Heller & Rebecca S. Eisenberg, *Can Patents Deter Innovation? The Anticommons in Biomedical Research*, 280 SCI. 698, 698 (1998) ("[O]verlapping patent claims in the hands of different owners" block innovation.); *see also* Maureen A. O'Rourke, *Toward a Doctrine of Fair Use in Patent Law*, 100 COLUM. L. REV. 1177, 1179 (2000) ("Essentially, the sheer number of patents creates an 'anticommons,' where rights are held by so many different patentees that the costs for any *one* to accumulate all the required licenses to enable production is prohibitive."). Heller has also looked at how placing boundaries on property, such as land use controls, can deter the tragedy of the anticommons. *See* Michael A. Heller, *The Boundaries of Private Property*, 108 YALE L.J. 1163 (1999).

III. THE PROBLEM

A. *Theory*

Part II explored the regulatory givings and the anticommons in isolation. To recap: regulatory givings occur when regulation is used to bestow benefits on a class of private actors;[46] an anticommons is a regime where one or more parties are given the right to exclude, which leads to underutilization of resources.[47] These conceptual strands now need to be brought together into an analytical framework.

The central premise of this Article is that the benefit administrative law bestows as a regulatory giving is frequently the ability to exclude, ironically often under the guise of the "public interest."[48] This anticommons, in turn, breeds both economic and social exclusion. Economically, new entrants can be hindered, thereby hurting competition and further entrenching incumbent monopolies. Socially, diversity and integration can be devastated by creating walls that divide "us" and "them."

Think, for instance, of spectrum licensing, copyright, timber rights, or zoning. Large swathes of bandwidth are underutilized, intellectual innovation is stifled, national forests are razed, and suburbs are segregated.[49] These illustrative examples will be explored in detail below.[50]

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[46] *See supra* Part II.A.

[47] *See supra* Part II.B.

[48] *See infra* Part IV.B.

[49] In some sense, this is the mirror image of the problem Charles Reich discusses. His emphasis is on how to transform government largesse into a right that enables individuals to sustain themselves in society. In other words, how to harness this largesse to improve society. *See* Reich, *supra* note 9. In contrast, the focus here is on how government largesse can work to the detriment of the vast majority of society. Later in the Article, however, proposals are made not only on how to stop detrimental givings, but how to turn government largesse into a positive good.

[50] There is a plethora of other examples. Indeed, the framework forces the question: where has administrative law bestowed a right on a segment of society at the risk of disenfranchising another, larger, segment? For instance, government helps private interests when it subsidizes manufacturing plants, sports stadiums, or casinos. It is interesting to note, for instance, that casinos and sports stadiums can be viewed as explicitly redistributing income from the poor to the wealthy. *See, e.g.*, Mark Puls, *Casinos on River Are in Jeopardy*, DETROIT NEWS, Dec. 24, 2000, at 1A; William Claiborne, *Detroit Rolls the Dice*, WASH. POST, Aug. 22, 1999, at A3; Robyn Meredith, *Chrysler Wins Incentives From Toledo*, N.Y. TIMES, Aug. 12, 1997, at D3. One might even argue that interstate highways have served as a massive subsidy to an emerging class of suburbanites and the automobile and transportation industries. In turn, this has led to an "underutilization" of the inner city and public transportation. *See, e.g.*, JACKSON, *supra* note 3, at 293 ("While it was a national purpose to build subsidized highways and utilities outside of

B. *Examples*

1. *Telecommunications: Spectrum Allocation*

The issue of how the airwaves should be allocated among different uses is complex, but analytically rich.[51] The structure of airwave allocation has not changed over the past seventy-years: it is essentially a "command-and-control" system where the FCC decides who gets to use what block of frequency and for what purpose.[52] Notorious is the FCC's free allocation of prime bandwidth to broadcasters in exchange for fulfillment of "public interest" obligations.[53] In fact, the high market values of broadcasters are largely due to this giveaway: a fact recognized nearly fifty years ago by Ronald Coase in his classic article on the FCC,[54] and more recently by Lawrence White.[55] One estimate is that spectrum

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cities, it was not national policy to help cities repair and rebuild aging transit systems, bridges, streets, and water and sewer lines.").

[51] *See, e.g.*, Yochai Benkler, The Commons as a Neglected Factor of Information Policy 5 (Oct. 3, 1998) (unpublished manuscript) ("Nowhere has the intellectual dualism of direct government intervention versus privatization been clearer than in the area of radio frequency spectrum regulation."), *at* http://www.tprc.org/abstracts98/benkler.pdf (last visited Oct. 9, 2003). Note that an environment akin to an anticommons is present in other areas of telecommunications law, notably cable, where regulators have largely given incumbent monopolies free reign to exclude competitors from the "last mile" of infrastructure running into subscribers' homes. *See* Reza Dibadj, *Toward Meaningful Cable Competition: Getting Beyond the Monopoly Morass*, 6 N.Y.U. J. LEGIS. & PUB. POL'Y 245 (2003).

[52] *See, e.g.*, Michael K. Powell, Remarks at the Silicon Flatirons Telecommunications Program, University of Colorado at Boulder (Oct. 30, 2002), *at* http://hraunfoss.fcc.gov/edocs_public/ attachmatch/DOC-227944A1.pdf (last visited Oct. 9, 2003). Recent auctions of certain portions of the bandwidth are an exception, and are discussed in detail *infra* in Part V.A.2.d.

[53] For a detailed discussion of the "public interest" myth, *see infra* Part IV.B.

[54] *See* R.H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1, 32 (1959) ("Because no charge has been made for the use of frequencies, franchises worth millions of dollars have been created, have been bought and sold, and have served to enrich those to whom they were first granted."). Coase gives examples of the high prices for broadcasting properties in New York City, Pittsburgh, and Philadelphia. *Id.* at 22. He goes on to note that "part of the extremely high return on the capital invested in certain radio and television stations has undoubtedly been due to this failure to charge for the use of the frequency. . . ." *Id.* Coase contuinues, "[i]t is not easy to understand the feeling of hostility to the idea that people should pay for the facilities they use." *Id.* at 24.

[55] White discusses the sales of ABC, NBC and CBS during the 80s and 90s where "[t]he purchase prices in each case ran to tens of billions of dollars. These prices were largely reflections of the scarcity values of the TV and radio stations owned directly by these networks plus the value of the network affiliation systems—themselves much the product of artificial scarcity." Lawrence J. White, *"Propertyzing" The Electromagnetic Spectrum: Why It's Important, and How to Begin*, 9 MEDIA L. & POL'Y 19, 27 (2000).

assigned, for free, to commercial TV broadcasters would approach a market value of $400 billion.[56] The business press has called this "the biggest handout of public assets since the land grants to the railroads."[57]

Two examples should help drive home this point: UHF television and high-definition television (HDTV). Back in 1952, the FCC granted large swathes of spectrum to UHF television operators.[58] Today, this vast expanse of airwaves is largely used to air syndicated re-runs and infomercials, with analysts agreeing that this is a colossal waste of public assets. For instance, FCC economists themselves estimate that the reallocation of a single UHF television channel from broadcasting to cellular applications in Los Angeles alone would have increased social welfare from 1992–2000 by over one billion dollars.[59] UHF license holders would be all too happy to stop pushing their trinkets and recycled programming, but on just one condition: not having paid anything for their licenses, they now want to "sell the spectrum at market prices and pocket the profit."[60]

As a society, where has all this regulatory benevolence gotten us? As noted telecommunications economist Thomas Hazlett has pointed out, we are left with an "economically crude and technically obsolete framework to separate various services in frequency space."[61] Bandwidth for cellular applications is

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[56] *See* MICHAEL CALABRESE, BATTLE OVER THE AIRWAVES: PRINCIPLES FOR SPECTRUM POLICY REFORM 4 (New America Found., Spectrum Series Working Paper No. 1, 2001), http://www.newamerica.net/Download_Docs/pdfs/Pub_File_610_1.pdf (last visited Oct. 9, 2003).

[57] Scott Woolley, *Dead Air*, FORBES, Nov. 25, 2002 at 138, 142. To make things worse, as Woolley points out, "[t]he railroads at least got freely transferable land, so that over time there was nothing to inhibit the use of the land for its most profitable purpose. Radio spectrum, in contrast, is frozen in anachronistic uses." *Id.* at 142.

[58] VHF television channels, licensed in 1945, are numbered 2 to 13—at 6 Megahertz (MHz) per channel, this amounts to 66 MHz. UHF comprises channels 14 through 69, or 330 MHz. *See id* at 144.

[59] *See* EVAN R. KWEREL & JOHN R. WILLIAMS, CHANGING CHANNELS: VOLUNTARY REALLOCATION OF UHF TELEVISION SPECTRUM vii (Fed. Communications Comm'n, OPP Working Paper No. 27, 1992), http://www.fcc.gov/Bureaus/OPP/working_papers/oppwp27.pdf (last visited Oct. 9, 2003). Kwerel and Williams defined social gains as the "present discounted value of the change in consumer plus producer surplus." *Id.*

[60] Woolley, *supra* note 57, at 144.

[61] Thomas W. Hazlett, *The Wireless Craze, the Unlimited Bandwidth Myth, the Spectrum Auction Faux Pas, and the Punchline to Ronald Coase's "Big Joke": An Essay on Airwave Allocation Policy*, 14 HARV. J. LAW & TECH. 335, 373 (2001) [hereinafter Hazlett Wireless Article]. Hazlett, for example, has pointed out how wasteful it is to leave channels adjacent to the broadcasting channel empty as a buffer. *See* Thomas W. Hazlett, *Liberalizing U.S. Spectrum Allocation*, 27 TELECOMMUNICATIONS POLICY 485, 490 (2003), *available at* http://www.manhattan-institute.org/hazlett/Liberalizing%20U.S.%20Spectrum%20 Allocation.pdf (last visited Oct. 9, 2003) [hereinafter Hazlett Allocation Article].

starved,[62] and new wireless applications are handicapped due to artificial spectrum scarcity.[63] In other words, even though broadcasters have not been granted property rights in the spectrum, they effectively hold rights that enable competing uses, and hence consumer welfare, to be excluded. This is the essence of an anticommons.

Recent events surrounding High-Definition Television (HDTV) add insult to injury. In an effort to improve the quality of broadcast television, the FCC granted each broadcaster an additional 6 Megahertz (MHz) channel within which to provide high-resolution digital television[64]—an event identified as the giveaway of a "$70 billion national asset."[65] As if this were not unsettling enough, the FCC ended up making the HDTV format optional, not mandatory, as long as at least one signal was broadcast digitally[66]—the remainder of the 6 MHz allocation[67] could be used for other services. As Hazlett has pointed out, broadcasters have taken advantage of this regulatory state of affairs by essentially "abandoning" HDTV.[68] Americans have thus been excluded from being able enjoy better video technology, and a small group of broadcasters have benefited. As one

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[62] The artificial spectrum shortage is of course manifested by busy signals and dropped calls. Since cellular providers shrink cells to reuse frequencies, it is also the reason why over 100,000 cell sites litter the landscape. *See* Woolley, *supra* note 57, at 142.

[63] *See id.* at 138 ("Cell phones and wireless industries of the future are snarled by a critical shortage of airwaves—the result of decades of wrongheaded, archaic regulations.").

[64] For a detailed description of the HDTV fiasco, see Yochai Benkler, *Siren Songs and Amish Children: Autonomy, Information and Law*, 76 N.Y.U. L. REV. 23, 98–101 (2001).

[65] *What Price Digital Television?*, N.Y. TIMES, Dec. 26, 1998, at A26; *see also* Yochai Benkler, *From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access*, 52 FED. COMM. L.J. 561, 572–73 (2000) (lamenting the HDTV giveaway).

[66] *See* Hazlett Wireless Article, *supra* note 61, at 352.

[67] Six MHz is the bandwidth required to transmit an old-fashioned analog television signal. Digital transmission, however, is far more spectrally efficient, and anywhere from two to three regular digital channels or one HDTV channel can be broadcast in a 6 MHz allocation. *See, e.g.*, Walter S. Ciciora, *Who Wants HDTV?*, CED, Aug. 1, 2002, at 76; *DTV Notebook*, TELEVISION DIG., Apr. 14, 1997.

[68] *See* Hazlett Wireless Article, *supra* note 61, at 352; *see also* Thomas W. Hazlett, Washington's Wireless Wars, Remarks at the Center for the Digital Economy at the Manhattan Institute 4 (Autumn 2002), *at* http://www.manhattan-institute.org/html/mif_2.htm (last visited Oct. 9, 2003) [hereinafter Hazlett CDEMI]. Hazlett remarked:

> There are 1,400 full-power TV stations, but only about 200 have gone digital thus far, and 55 percent of all TV stations have officially informed the FCC that they will not make this [May 1, 2003] deadline [for all American TV stations to transmit digital programming]. By the end of 2006, we're supposed to turn off the old analog signals, going to all-digital TV broadcasting. That deadline will, likewise, be a figment of the FCC's imagination.

Id.

commentator notes, broadcasting interests would "be crazy to spend money on fantastic display quality when they can simply exploit a captive audience with low-quality video that uses as little bandwidth as possible."[69]

As this brief foray into spectrum allocation shows, our approach to using the airwaves is flawed.[70] While the FCC has begun efforts at reform,[71] solutions remain elusive.[72] During a recent FCC Workshop on spectrum allocation reform, FCC Chairman Michael Powell noted that he had "never worked on an issue that has so much smoke and nobody can find the fire."[73] Commissioner Kathleen Abernathy put it succinctly by asking "why are we in such a mess today . . . ?"[74] The reason we are in such a mess today is that we have ignored that granting regulatory rights is far from innocuous: even though they do not represent property rights, they nonetheless can create significant holdup problems. After all, as a society it might be comforting to think that since we have not granted property rights to broadcasters, we have not done much damage, since the broader polity is still in control. Put simply, we have failed to realize how decades of regulatory givings can create an anticommons.

2. *Intellectual Property: Copyright*

Recent developments in copyright law are also indicative of the dangers of an exclusionary anticommons.[75] Two developments merit particular attention: the

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[69] Charles Platt, *The Great HDTV Swindle*, WIRED, Feb. 1997, at 57, 189.

[70] *See, e.g.*, Michael K. Powell, Press Conference, "Digital Broadband Migration" Part II, at 7 (Oct. 23, 2001) ("Put simply, our Nation's approach to spectrum allocation is seriously fractured. . . . The spectrum allocation system is not effectively moving spectrum to its highest and best use in a timely manner."), *at* http://www.fcc.gov/Speeches/Powell/2001/spmkp109.pdf (last visited Oct. 9, 2003) [hereinafter Powell Broadband Comments]; Michael K. Powell, Remarks at the National Association of Cellular Telecommunications & Internet Association (CTIA) 8 (Mar. 19, 2002) ("So, there is sort of this odd hodgepodge of allocation choices in spectrum management writ large."), *at* http://www.fcc.gov/Speeches/Powell/2002/spmkp206.pdf (last visited Oct. 9, 2003) [hereinafter Powell CTIA Comments].

[71] For a discussion as to whether these efforts will likely help or hurt the situation, see *infra* Part V.A.

[72] For a perspective on what can be done to ameliorate the situation, see *infra* Part VI.

[73] Michael K. Powell, Statement at FCC Spectrum Rights and Responsibilities Protection Public Workshop 5, (Aug. 9, 2002), *at* http://www.fcc.gov/sptf/files/0809fcc.pdf (last visited Oct. 10, 2003) [hereinafter FCC Spectrum Workshop].

[74] *Id.* at 16 (statement of Kathleen Abernathy, FCC Commissioner).

[75] Note that anticommons are created in other areas of intellectual property law. For instance, overlapping rights in drug patents stifle scientific innovation. *See* Heller & Eisenberg, *supra* note 45. Patent law has grown increasingly expansive, allowing, for example, rights to ill-defined business processes. *See, e.g.*, State St. Bank & Trust Co. v. Signature Fin. Group, 149 F.3d 1368, 1373 (Fed. Cir. 1998) ("Today, we hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final

Sincessant drive to increase the length of copyright protection and the move to limit fair use of digital information.[76]

The Copyright Act of 1790 originally gave authors protection for fourteen years.[77] From 1790 to 1962, Congress extended copyright terms twice, and a further eleven times since 1962.[78] The most recent extension, the Sonny Bono Copyright Term Extension Act (CTEA),[79] retroactively increases the duration to the "life of the author and 70 years after the author's death."[80] For works owned by a corporation, "copyright endures for a term of 95 years from the year of its first publication."[81] All this despite the Constitution's Copyright Clause that instructs Congress "To promote the Progress of Science and useful Arts, by securing *for limited Times* to Authors and Inventors the exclusive Rights to their

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share price, constitutes a practical application of a mathematical algorithm, formula, or calculation . . . ."). More broadly, as Maureen O'Rourke has noted:

> [I]n recent years, (i) the judiciary has expanded the subject matter of the patent laws to encompass technologies considered unpatentable in the 1950s as well as others never anticipated fifty years ago; (ii) the PTO [Patent and Trademark Office] has issued patents at a record rate; and (iii) the primary judicial institution overseeing the system since 1982 (the Federal Circuit) has held patents valid more often than its predecessor courts.

O'Rourke, *supra* note 45, at 1178–79 (citations omitted). In the realm of trademark, some well-known commentators have criticized corporations for trying to use intellectual property laws to squelch free speech. *See, e.g.*, Jack M. Balkin, *Don't Use Those Words: Fox News Owns Them*, L.A. TIMES, Aug. 14, 2003, at B15 (arguing that a federal court should dismiss Fox News' lawsuit against satirist Al Franken for using the words "fair and balanced" in a book title). Judge Denny Chin did in fact dismiss Fox's attempt, noting that the words "fair and balanced" are too common to claim trademark infringement. *See* Susan Saulny, *In Courtroom, Laughter at Fox and a Victory for Al Franken*, N.Y. TIMES, Aug. 23, 2003, at B5.

[76] These are indicative of an overall trend to interpret copyright protections more broadly. *See, e.g.*, Jed Rubenfeld, *The Freedom of Imagination: Copyright's Constitutionality*, 112 YALE L.J. 1, 52 (2002) (noting that historically, "infringement" required the copying of an entire work, whereas today it can consist simply of reproducing a few sentences). There is even a legal battle unfolding over whether manufacturers of digital video recorders are violating copyright law by allowing consumers to skip commercials when recording television programs. *See* Newmark v. Turner Broad. Network, 226 F. Supp. 2d 1215 (C.D. Cal. 2002); Thomas Carey, *Fair Use: The Electronic Frontier Jumps Into the Movie Studios' Fight with SONICBlue*, INTELL. PROP. TODAY, Dec. 2002, at 20; Lee Gomes, *Hollywood Needs a Fast-Paced Script For Copyright Issues*, WALL ST. J., Feb. 10, 2003, at B1.

[77] Copyright Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124.

[78] *See, e.g.*, Heather Green, *Copyrights—Or Mothballs?*, BUS. WK. ONLINE, Mar. 4, 2002, *at* http://www.businessweek.com/technology/content/mar2002/tc2002034_6498.htm (last visited Oct. 10, 2003).

[79] Sonny Bono Copyright Term Extension Act of 1998, Pub. L. No. 105-298, § 120(a), 112 Stat. 2827 (1998) (codified at 17 U.S.C. §§ 301–04 (2000)).

[80] 17 U.S.C. § 302(a) (2002).

[81] *Id.* § 302(c).

respective Writings and Discoveries."[82] The opportunity to stifle innovation and derivative use is obvious.[83] Moreover, the gradual extension of rights is troublesome given that the reversion of copyright to the public domain is precisely what is used to balance the rights of the author against those of the public, and hence justify the very existence of copyright.[84]

As if this were not enough, another law, the Digital Millennium Copyright Act (DMCA),[85] essentially eliminates fair use of information delivered by digital means. It does this by not allowing the bypass of any copy-protection scheme, even if it is to make a legal copy—for instance, for personal use.[86] To the extent that intellectual property will be increasingly delivered by digital means, this prevents the public from taking advantage of new information delivery mechanisms.

Note that copyright holders, much like spectrum licensees, do not have the "bundle of rights" traditionally associated with property. But regulatory givings have nonetheless engendered an anticommons that excludes the public. As Ruth Okediji has pointed out, increased copyright protection "favors those who create and own information, but fails to consider the other vital component of the information revolution—public welfare."[87] A "technological world of cyber-

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[82] U.S. CONST. art. I, § 8, cl. 8 (emphasis added). Note that the Supreme Court has upheld the CTEA. *See* Eldred v. Ashcroft, 537 U.S. 186 (2003). *But see* Lawrence Lessig, *Time to End the Race for Ever-Longer Copyright*, FIN. TIMES (London), Oct. 17, 2002, at 21 (arguing that by striking down the Sonny Bono Copyright Extension Act, the Supreme Court would be enforcing "the limits of the Constitution against Congress"); YOCHAI BENKLER, PROPERTY, COMMONS AND THE FIRST AMENDMENT: TOWARDS A CORE COMMON INFRASTRUCTURE 70 (2001) (White Paper for the Brennan Center for Justice at NYU School of Law) (wryly observing that Congress seems "[d]azzled by the industrial conception of the 'limited times' exception"), *at* http://www.benkler.org/Pub.html#Commons (last visited Oct. 11, 2003).

[83] Notice that this is a variation on the practice of buying patents in order to prevent innovation, which legal realists recognized early in the twentieth century. *See* Morris R. Cohen, *Property and Sovereignty*, 13 CORNELL L.Q. 8, 20 (1927) ("Patents for processes which would cheapen the product are often bought up by manufacturers and never used.").

[84] *See, e.g.*, Justin Hughes, *The Philosophy of Intellectual Property*, 77 GEO. L.J. 287, 323 (1988).

[85] Digital Millennium Copyright Act, Pub. L. No. 105-304, § 103(a), 112 Stat. 2863 (1998) (codified at 17 U.S.C. § 1201(a)–(b) (2000)).

[86] "No person shall circumvent a technological measure that effectively controls access to a work protected under this title." 17 U.S.C. § 1201(a)(1)(A) (2000). In theory, the DMCA does allow exceptions, at the discretion of the Librarian of Congress, for "noninfringing uses." 17 U.S.C. § 1201(a)(1)(C) (2000). However, "the [Library's] Copyright Office "has denied virtually every request by librarians, educators and consumers seeking exceptions to the [DMCA]." Edmund Sanders, *She Holds the Cards in Copyright Fight*, L.A. TIMES, Oct. 19, 2002, at C1. *See also* Elliot Zaret, *Access Denied*, WASH. LAW., Feb. 2003, at 21, 25–26.

[87] Ruth Okediji, *Givers, Takers, and Other Kinds of Users: A Fair Use Doctrine for Cyberspace*, 53 FLA. L. REV. 107, 179–80 (2001).

vassals and cyber-lords cannot be what the Founding Fathers envisioned as progress."[88]

3. *Natural Resources: Forest Management*

Natural resources and environmental law are replete with misguided regulatory largesse.[89] One vivid example is the management of our national forests. The federal government has sought to attract logging operations by offering private companies lucrative rights to cut down trees. This is accomplished primarily via concessionary stumpage fees and weak enforcement of environmental laws that "do not incorporate the full costs of environmental damage and restoration, and do not incorporate the range of environmental benefits provided by forests."[90]

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[88] *Id.* at 182; *see also* Benkler, *supra* note 51, at 20 ("The conclusion relevant here is that increases in intellectual property rights are likely to lead, over time, to concentration of a greater portion of the information production function in the hands of large commercial organizations that vertically integrate new production with inventory management."); Green, *supra* note 78 (outlining the "double whammy of expanding and extending copyright control").

[89] Beginning with the Mining Act of 1872, which gave away mineral rights on public land. *See* Harold J. Krent & Nicholas S. Zeppos, *Monitoring Governmental Disposition of Assets: Fashioning Regulatory Substitutes for Market Controls*, 52 VAND. L. REV. 1703, 1720 (1999). Ranchers also benefit from grazing rights on federal land which not only damage the environment, but are estimated at one-fourth the level of what they would be on private land. *See, e.g, id.* at 1732–33; Richard Stroup & John Baden, *Externality, Property Rights, and the Management of Our National Forests*, 16 J.L. & ECON. 303, 311 (1973). In fact, the grazing issue has, sadly, provoked violence and threats against government officials. *See, e.g.*, R. Brent Walton, *Ellickson's Paradox: It's Suicide to Maximize Welfare*, 7 N.Y.U. ENVTL. L.J. 153, 185 (1999) ("In the West there is a serious problem of overgrazing. One proposed solution to the problem, the closure of public lands to grazing by the Bureau of Land Management (BLM), has prompted violent replies by some ranchers, including the bombing of federal offices."); *Building Bombed*, PITTSBURGH POST-GAZETTE, Nov. 1, 1993, at A5 (bomb exploded on the roof of Bureau of Land Management Building in Nevada that was involved in controversies over grazing fees); Hal Bernton, *Grazing-Cutback Proposal Meets Trouble on the Range*, SEATTLE TIMES, July 6, 1997, at B8 (County Sheriff warning that "U.S. Department of the Interior agents risked being thrown into jail if they venture into Owyhee County [Idaho]."). In a different context, Bruce Ackerman and Donald Elliott have even argued that giving companies free pollution emission credits is a giveaway to large corporations. *See* Bruce A. Ackerman & Donald Elliott, *Air Pollution "Rights"*, N.Y. TIMES, Sept. 11, 1982, at 23.

[90] Paul Stanton Kibel, *Reconstructing the Marketplace: The International Timber Trade and Forest Protection*, 5 N.Y.U. ENVTL. L.J. 735, 752 (1996). Kibel observes:

> [P]olitical collusion between government and logging interests adversely impacts native forests. By keeping the production costs of logging low, such collusion has increased the industry's profit margin while simultaneously exerting downward pressure on the market price of timber and wood-based products. These profits and low market prices help increase demand, and provide industry with excess capital.

Id. at 754 (citations omitted).

Thus, logging companies, who have no real property interest in the forest—after all, title rests with the government—are able to come in and harvest the public's land for their private benefit. As if the overall allowance were not disconcerting enough, a particularly egregious giving is the "salvage logging rider," a 1976 law that allows burned trees to be sold as salvage lumber, no questions asked.[91] Commentators have noted the unsavory incentives this creates as loggers rush to declare anything they can "salvage."[92] New Forest Service rules proposed in 2003, supposedly to reduce the risk of wildfires, will make aggressive logging even easier.[93]

The result has been devastating, both environmentally and economically. As Perri Knize describes:

> Entire mountain ranges have their faces shaved in swaths of forty to a hundred acres which from the air resemble mange. From the ground these forests, charred and smoking from slash burning, look like battlefields.[94]

Economically, the public fisc has suffered mightily. The Forest Service has lost an astounding amount of taxpayer money: $6 billion between 1980 and 1991, and $1 billion from 1992 to 1994.[95] As Brent Walton has concluded, "[t]o date, such management has been nothing other than a nursery for industry harvest, all on the taxpayer's dime."[96] But it is critical to observe that the mechanisms used are much more subtle than a vulgar transfer of assets under traditional corporate

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[91] *See, e.g.*, Michael Axline, *Salvage Logging: Point and Counterpoint: Forest Health and the Politics of Expediency*, 26 ENVTL. L. 613, 613 (1996).

[92] *See* Paul Roberts, *The Federal Chain-Saw Massacre*, HARPER'S MAG., June 1997, at 37, 45–46. Note that attempts at reform have been met by threats of violence. *See id.* at 44 (discussing the threats of torching the Warner Creek drainage in north-central Oregon if logging were curtailed). *Cf. supra* note 89 (describing threats of violence relating to grazing rights on federal land).

[93] *See, e.g.*, William Booth, *Wildfire Plans Generate Heat*, WASH. POST, Mar. 9, 2003, at A3 ("The new rules . . . would allow federal foresters and the timber companies to fell larger, bigger trees—and a lot of them . . . .").

[94] *See* Knize, *supra* note 1, at 98. What makes this phenomenon even more concerning is that our public lands apparently contain "the most biomass per acre of any forests on the planet." *Id.*

[95] *See* Roberts *supra* note 92, at 47. Part of the complication is that the Forest Service's accounting has historically been opaque. For example, though it might show a profit on its books, this does not take into account payments to counties and expenses for road maintenance, surveying, protection against insects and disease, staff buildings and the like. Note that in some instances, roads had been amortized over 1,800 years. *See id.* at 46. *Cf.* Curt Anderson, *Timber Sales Lost Millions in 1997*, CHATTANOOGA TIMES, June 11, 1998, at C6 ("After years of ignoring many costs of logging in the nation's 192 million acres of national forests, the government is now admitting timber sales lost more than $88 million last year.").

[96] Walton, *supra* note 89, at 183.

welfare. This has all been made possible by a regulatory giving—in Hohfeldian terms, giving loggers *rights* to cut down national forests, which forces upon citizens the *duty* to stay away. This is the essence of an anticommons.

4. *Local Government Law: Zoning*

Zoning ordinances are yet another example of how a regulatory giving facilitates the anticommons. The giving here in fact occurs at two levels. First, the states have decided to give suburbs the right to organize their spatial arrangements without overseeing their effects on the social fabric.[97]

Next, local governments manifest this power via zoning ordinances. Note again that zoning does not confer any property right per se.[98] For instance, by dictating that certain areas can only contain single-family homes, or particular lot sizes or set back requirements, a financial barrier is created which members of many socio-economic groups cannot meet.[99] In his study of American suburbanization, Charles Haar laments the "invidious discrimination that can result from local community regulatory power"[100] and how such power is used to "exclude low-income groups"[101] and to "prevent minorities from gaining a foothold in the locality in the same way that private restrictive deeds did."[102]

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[97] *See, e.g.*, CHARLES M. HAAR, SUBURBS UNDER SIEGE: RACE, SPACE, AND AUDACIOUS JUDGES 187 (1996) ("Municipalities wielded local land-use law to keep rich and poor, blacks and whites far apart, separated by legal walls surrounding suburbia."); JACKSON, *supra* note 3, at 277 ("The fact that the peripheral neighborhoods had then and usually have now the legal status of separate communities has given them the capacity to zone out the poor, to refuse public housing, and to resist the integrative forces of the modern metropolis."). For a general critique of traditional concepts of decentralization and local autonomy, see Jerry Frug, *Decentering Decentralization*, 60 U. CHI. L. REV. 253 (1993).

[98] If anything, a zoning regulation is traditionally conceived of as limiting property rights.

[99] For an example of a typical zoning ordinance, see S. Burlington County NAACP v. Township of Mount Laurel, 336 A.2d 713, 719–20 (N.J. 1975) (Mt. Laurel I). The *Mount Laurel I* court explained:

> The general ordinance provides for four residential zones, designated R-1, R-1D, R-2 and R-3. All permit only single-family, detached dwellings, one house per lot . . . .
>
> [These] requirements, while not as restrictive as those in many similar municipalities, nonetheless realistically allow only homes within the financial reach of persons of at least middle income.

Id. For a discussion of *Mt. Laurel* in the context of the proper role for judicial review, see *infra* Part VI.C.1.

[100] HAAR, *supra* note 97, at 208.

[101] *Id.* at xiii.

[102] *Id.* at 8; *see also id.* at 201 ("Exclusionary zoning is, after all, the assertion of delegated public power by a local community to the detriment of a cherished assumption of the society: the individual's subjective pursuit of happiness and well-being.").

As if it were not detrimental enough on its own, exclusionary zoning also provides a roadmap for other tools to facilitate exclusion. For instance, the process of "red lining"—or only providing home loans within certain areas—was started with the Home Owners Loan Corporation (HOLC), which created Residential Security Maps based on zoning.[103] Similarly, the Federal Housing Authority would set requirements for loan guarantee requirements that were eerily based on exclusionary zoning.[104]

In addition, fiscal policy supports zoning by exacerbating the anticommons. In particular, under the Internal Revenue Code, mortgage interest and real-estate taxes can be deducted from gross income, whereas rental payments, typical for urban apartments, are not deductible.[105]

Even intentions to ameliorate the problem have made things worse. For instance, under the Wagner-Steagall bill, the United States Housing Authority was empowered to build public housing.[106] But this regulatory giving again bestowed discretion on the municipalities who proceeded to place the housing in poor, urban neighborhoods.[107] As Kenneth Jackson has pointed out, the result has been "to segregate the races, to concentrate the disadvantaged in inner cities, and

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[103] *See* JACKSON, *supra* note 3, at 197 ("HOLC devised a rating system that undervalued neighborhoods that were dense, mixed, or aging. Four categories of quality—imaginatively entitled First, Second, Third, and Fourth, with corresponding code letters of A, B, C, and D and colors of green, blue, yellow, and red—were established.").

[104] *See id.* at 208. Jackson states:

> [T]he Federal Housing Administration set up minimum requirements for lot size, setback from the street, separation from adjacent structures, and even for the width of the house itself. While such requirements did provide light and air for new structures, they effectively eliminated whole categories of dwellings, such as the traditional 16-foot-wide row houses of Baltimore, from eligibility from loan guarantees.

Id.

[105] *See id.* at 294 ("Simply put, the Internal Revenue Code finances the continued growth of suburbia."). He even notes that the "reimbursement formulas for water-line and sewer construction have had an impact on the spatial patterns of metropolitan areas." *Id.* at 191. Jackson concludes that "the basic direction of federal policies toward housing has been the concentration of the poor in the central city and the dispersal of the affluent to the suburbs." *Id.* at 230.

[106] United States Housing Act of 1937 (Wagner-Steagall Act), Pub. L. No. 75-412, 50 Stat. 888 (codified as amended at 42 U.S.C. § 1437(a)–(j) (1982)).

[107] *See* JACKSON, *supra* note 3, at 225 ("Because municipalities had discretion on where and when to build public housing, the projects invariably reinforced racial segregation."); *see also id.* at 228 ("95 percent of Chicago's public housing, however, was dumped into the most poverty-impacted black ghettoes in the city.... Poorly maintained, segregated, cheaply constructed, and often physically dangerous, the projects had become 'the dumping ground for the poor.'"). For a discussion of what might be motivating the municipalities, see *infra* Part IV.A.2.

to reinforce the image of suburbia as a place of refuge for the problems or race, crime, and poverty."[108]

Charles Haar sums up the anticommons eloquently:

> The state confers on localities the sovereign power to regulate land use as they see fit. And although local geographical boundaries are increasingly artificial as today's metropolis spreads out across counties and districts, suburbs, as separate legal municipal corporations, deploy exclusionary zoning in its many forms to keep out "undesirables"—both uses and people. *Law has become a surrogate for physical walls.* Minimum lot and room sizes, setback rules, and discretionary procedures for multifamily developments—familiar argot to the zoning specialist—become dependable weapons in the exclusionary zoning arsenal.[109]

The bottom line here is that regulatory givings have had everything to do with suburbanization and exclusion: "government largesse can affect where people live,"[110] too often to the detriment of social integration and mobility.[111]

Table 1 summarizes the illustrative examples. The next step is to grapple with why this is happening.

Table 1: Summary of Examples

Example	*Regulatory Giving*	*Anticommons*
Airwaves	▪ Broadcasters receive right to use airwaves for free ▪ UHF and HDTV are particularly egregious examples	▪ Incumbents able to hold up migration of spectrum to more efficient uses
Copyright	▪ Copyright terms regularly extended ▪ Fair use of digital works outlawed	▪ Competition and innovation based on derivative uses stifled
Forest Management	▪ Private corporations offered logging rights at below cost	▪ Both citizens and the broader ecosystem lose right to benefit from forests
Zoning	▪ States confer zoning authority to suburbs ▪ Suburbs, in turn, deploy zoning to benefit spatial homogeneity	▪ Housing integration of lower income and minority groups prevented

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[108] JACKSON, *supra* note 3, at 219.

[109] HAAR, *supra* note 97, at 8 (emphasis added).

[110] JACKSON, *supra* note 3, at 190.

[111] *See, e.g.*, HAAR, *supra* note 97, at 5 ("Indeed, for partisans of democracy, the most disturbing characteristic of the metropolitan scene is surely the high degree of racial and ethnic separation in the new spatial pattern."); *see also* JACKSON, *supra* note 3, at 218 ("The poor in America have not shared in the postwar real-estate boom, in most of the major highway improvements, in property and income-tax write-offs, and in mortgage insurance programs.").

IV. WHY?

A. *Public Choice*

1. *A Powerful Theme . . .*

Public choice theories can offer an insightful, albeit incomplete, account of why these pernicious regulatory givings occur. As Daniel Farber and Philip Frickey succinctly point out, "[i]n public choice, government is merely a mechanism for combining private preferences into a social decision."[112] The idea can be traced backed to Madison's account of how "factions" can organize to push their own agenda to the detriment of society at large.[113] In the examples discussed above,[114] one can easily imagine various lobbying groups exercising undue influence: broadcasters, large corporations holding intellectual property, logging interests, and wealthy landowners, to name a few.

Indeed, George Stigler, in his seminal contribution to public choice theory, performed an empirical analysis of various regulations to conclude that the more powerful the interests being regulated, the more advantageous the regulations turned out being to them.[115] Stigler thus proposed a theory of "regulatory capture," making the bold statement that "regulation is acquired for the industry and is designed and operated primarily for its benefit."[116] Distinguished commentators have echoed this point of view over the years.[117]

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[112] DANIEL A. FARBER & PHILIP P. FRICKEY, LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION 44 (1991).

[113] Madison defines factions as "a number of citizens, whether amounting to a majority or minority of the whole, who are united and actuated by some common impulse of passion . . . adverse to the rights of other citizens, or to the permanent and aggregate interests of the community." THE FEDERALIST No. 10, at 57 (James Madison) (Jacob E. Cooke ed., 1961).

[114] *See supra* Part III.B.

[115] For instance, Stigler performed an empirical analysis of interstate trucking. *See* George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. EC. & MGMT. SCI. 3, 9 (1971) ("The regulations on [truck] weight were less onerous; the larger the truck population in farming, the less competitive the trucks were to railroads (i.e., the longer the rail hauls), and the better the highway system . . . ."). He also came to similar conclusions in the context of occupational licensing. *See id.* at 13–17.

[116] *Id.* at 3.

[117] *See, e.g.*, Reich, *supra* note 9, at 767. Reich states:

> Public-private partnerships attain their greatest significance when they are translated into power. Sometimes private elements are able to take over the vast governmental powers deriving from largess, and use them for their own purposes. Thus, an exercise of governmental power may reflect the standards of the dominant group in an industry or occupation, and represent an effort to enforce these standards on others.

Id.; *see also* Krent & Zeppos, *supra* note 89, at 1708. Krent and Zeppos state:

Mancur Olson's research on group dynamics has added a critical organizational dimension which gives public choice ideas further credence:

> The smaller groups—the privileged and intermediate groups—can often defeat the large groups—the latent groups—which are normally supposed to prevail in democracy. The privileged and intermediate groups often triumph over the numerically superior forces in the latent or large groups because the *former are generally organized and active while the latter are normally unorganized and inactive.*[118]

The fact that small groups are better organized than large groups accords with today's reality. Certain relatively narrow industry lobbies—pharmaceuticals, insurance, and the like—are powerful; other, more diffuse ones, such as the Chamber of Commerce,[119] are not.[120]

> Private entities have successfully lobbied Congress for public resources to subsidize their own financial activities. Interest group influence continues post-enactment, with groups exerting leverage to retain legislative benefits. Moreover, private groups have similarly curried favor with agencies to obtain (or retain) government largesse. Such governmental subsidization reflects the organizational advantages of the few who can benefit at the expense of the less well-organized public.

Id.; *see also* Stroup & Baden, *supra* note 89, at 304–05. Stroup and Baden note:

> In general, all policy making in the American political context follows a similar pattern. Demands for rights to public assets are made by individuals or groups upon the political system at some level. The component of the political system responds by ignoring the demands, by converting the demands into public policy, or by taking steps to strengthen the existing policy.

Id.; *see also* Eli M. Noam, The Future of Telecommunications, The Future of Telecommunications Regulation, Remarks at the Conference on Telecommunications, Pennsylvania State University (Apr. 26, 1999) ("Regulation exists in response to interest groups. Whether they are incumbents, entrants, consumers, rural residents, or large users."), *at* http://www.citi.columbia.edu/elinoam/articles/Naruc9.htm (last accessed Oct. 11, 2003).

[118] MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION 128 (1971) (emphasis added). Olson devotes considerable energy to providing the analysis behind this assertion. *See id.* at 22–36 (theoretical underpinnings); *id.* at 53–57 (empirical support). Note also the intuitive nature of his conclusion. *See id.* at 127 ("Practical politicians and journalists have long understood that small 'special interest' groups, the 'vested interests,' have disproportionate power.").

[119] *See id.* at 146.

[120] *See id.* at 142–43. Olson writes:

> The number and power of the lobbying organizations representing American business is indeed surprising in a democracy operating according to the majority rule.... The high degree of organization of business interests, and the power of these business interests, must be due in large part to the fact that the business community is divided into a series of (generally oligopolistic) "industries," each of which contains only a fairly small number of firms.

Id.

These observations fit our examples particularly well. To begin with, though the threat of capture exists across all regulations, regulatory givings are particularly dangerous since they may produce winners without producing obvious losers, making them a very attractive policy tool. Givings that harm no identifiable person may not attract public attention and are unlikely to lead to legal challenges. The dark side, of course, is that the government may abuse its power to reward political supporters.[121]

As a general rule, broadcasters, media holding companies, and logging firms are more concentrated and better organized than say consumers, hikers or environmentalists. Specific examples serve to drive the point home.[122] On the copyright anticommons front, there is a worry, for example, that the Library of Congress Copyright Office "is too closely aligned with the interests of copyright owners."[123]

Take also exclusionary zoning. As Charles Haar observes:

> Suburban governments operate on behalf of their own partisan considerations; their main interests reside in preserving tax ratables and in keeping densities low. Such local parochialism makes land scarce for housing, especially that destined for low-income families. *Because it is easy for local homeowners to control the local council, a classic example of Madison's factionalist ghost appears.* Entry of potentially dissenting voices is barred.[124]

Some commentators criticizing the suburbanization movement have even questioned the true motivations of the Census Bureau[125] and politicians representing central cities.[126]

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[121] Bell & Parchomovsky, *supra* note 8, at 574–75; *see also id.* at 577 ("In all, there is real reason to suspect that the power to give is a major source of potential corruption and mischief."); *supra* notes 19–20.

[122] Examples reflect those *supra* Part III.B.

[123] Sanders, *supra* note 86 (raising concerns about a "'revolving door' between the Copyright Office and the entertainment industry").

[124] HAAR, *supra* note 97, at 180 (emphasis added); *see also id.* at 179 ("[P]olicy formulation, when entrusted to the elected instrumentalities of government, can become too easily identified with the interests of the economically powerful. This is especially true of the small suburb with its insulated majority.") (citation omitted).

[125] *See, e.g.*, JACKSON, *supra* note 3, at 5 ("Because the Census Bureau is subject to heavy political pressures, the way it defines 'suburbs' and 'metropolitan areas' serves more to confuse than to enlighten the serious student.").

[126] *See, e.g.*, WILLLIAM A. FISCHEL, THE ECONOMICS OF ZONING LAWS: A PROPERTY RIGHTS APPROACH TO AMERICAN LAND USE CONTROLS 316–38 (1985) (Fischel makes the subtle point that if suburbs permitted low-income housing, then the importance of politicians representing urban areas would dwindle since their constituents would move into the suburbs. Fischel also argues that urban public housing can be conceived as an inefficient distribution of wealth in exchange for votes from the beneficiaries).

Forest management raises much the same issues, with most of the cynicism directed at the Forest Service.[127] Note, for example, the striking parallel between Haar's critique of the local council,[128] and Perri Knize's view that the "[f]orest Service's timber program is beneficial chiefly to politicians in Washington, to a small segment of the timber industry, and to the Forest Service's administrators. *Taxpayers, small communities, recreationists, the owners of private timberland—and the land itself—all lose.*"[129] Observations on public choice motivations behind spectrum policy,[130] meanwhile, date back to Ronald Coase's classic article on the FCC. Coase expressed concern over disclosures "concerning the extent to which pressure is brought to bear on the Commission by politicians and businessmen (who often use methods of dubious propriety) with a view to influencing its decisions."[131]

In a series of articles, Thomas Hazlett argues that the Radio Act of 1927, and indeed the FCC, came into being not so much to put an end to chaotic interference on the airwaves,[132] but rather "as the result of a calculated rent-

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[127] *See, e.g.*, Roberts, *supra* note 92, at 38–40. Roberts notes:

> [W]hat is essentially a timber bureaucracy, one whose budget is tied to the number of trees it can 'harvest' and whose managers have long been rewarded for keeping those harvests high—even if it meant selling trees at a loss or breaking environmental laws. . . . Actually, the Forest Service is among the Beltway's more adept insiders.

Id.; *see also* Knize, *supra* note 1, at 104 ("Forest Service administrators are concerned with maximizing their budgets, holding on to their jobs, and preserving the status quo.").

[128] *See supra* note 124.

[129] Knize, *supra* note 1, at 112 (emphasis added); *see also* Douglas Gantenbein, *Forests May Not Get Thin but Bureaucrats Will Get Fat*, L.A. TIMES, Sept. 3, 2003, at B13 ("[T]he Healthy Forests Initiative probably has another name: the Forest Service Bureaucrat Lifetime Employment Act.").

[130] Note that there are other areas in telecommunications law that are equally amenable to public choice analysis. For example, broadcasting interests were able to thwart the development of cable in its early years. *See, e.g.*, Dibadj, *supra* note 51; Thomas W. Hazlett, The Spectrum Allocation System, Remarks at the National Press Club (Nov. 2, 2001), *at* http://www.aei.org/news/newsID.13310,filter./news_detail.asp (last accessed Oct. 11, 2003).

[131] Coase, *supra* note 54, at 35–36; *see also* R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 18 (1960) (decisions are "made by a fallible administration subject to political pressures and operating without any competitive check") [hereinafter Coase Social Cost]. Even Leo Herzel, who first proposed the idea of privatizing the spectrum, noted the "opposition from groups which have acquired a vested interest in the present methods of regulation." Leo Herzel, Comment, *"Public Interest" and the Market in Color Television Regulation*, 18 U. CHI. L. REV. 802, 815 (1951).

[132] Hazlett argues that a homesteading regime of "priority-in-use rights established on a 'first come, first served' basis" was sufficient to prevent interference. Thomas W. Hazlett, *Assigning Property Rights to Radio Spectrum Users: Why Did FCC License Auctions Take 67 Years?*, 41 J.L. & ECON. 529, 530 (1998) [hereinafter Hazlett Auctions]; *see also* Thomas W. Hazlett, *The Rationality of U.S. Regulation of the Broadcast Spectrum*, 33 J.L. & ECON. 133,

sharing arrangement serving the interests of regulators and industry incumbents."[133] In fact, spectrum allocation is viewed as a rational bargain: regulators get authority over airwaves, and broadcasters get zero-priced rights.[134] This in turn, explains the massive regulatory inefficiencies:

> Material self-interest of these primary participants in the regulatory process strongly favors under-utilization of radio spectrum. The block allocation system has historically served spectrum-based industries, such as AM radio, television broadcasting, and cellular radio, as a cartel enforcement device, limiting service competition by denying licenses to newcomers and imposing technical rules that lower industry output.[135]

Other academics,[136] journalists,[137] think tanks,[138] and even government officials[139] have echoed these concerns, some even going so far as to connote a

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151 (1990) [hereinafter Hazlett Rationality] ("It was on this homesteading principle that the judge found a common-law remedy to the potential 'tragedy of the commons.'").

[133] Hazlett Auctions, *supra* note 132, at 543.

[134] *See* Hazlett Rationality, *supra* note 132, at 170 ("The fact that spectrum fees and discretionary regulatory authority are substitutes has never been misunderstood in the U.S. regulation of the broadcast spectrum."); Hazlett Auctions, *supra* note 132, at 543 ("The broadcast licensing bargain—zero-priced rights in exchange for 'public interest' obligations—creates an exchange that cannot be easily duplicated via an auction regime in which licensee obligations are explicitly delineated."). While Hazlett's descriptive analysis is well-reasoned and provocative, his solution, that of privatizing the airwaves via auction, is overly simplistic. *See infra* Part V.A.

[135] Hazlett Wireless Article, *supra* note 61, at 387–88; *see also id.* at 406–53 (giving examples of how the FCC allowed incumbents to hurt new entrants).

[136] *See, e.g.*, White, *supra* note 55, at 26 ("With licenses distributed for free, incumbent license holders often have an extremely valuable privilege that they are understandably reluctant to see undermined. Hence, they are prepared to lobby vigorously to preserve the status quo and defeat, or at least delay, competitive change."); Pablo T. Spiller & Carlo Cardilli, *Towards a Property Rights Approach to Communications Spectrum*, 16 YALE J. ON REG. 53, 62–63 (1999) ("In fact, it is far more likely that regulators' real interest in perpetuating the existing spectrum administration stems from their desire to maintain the steady flow of political rents generated by control over spectrum.").

[137] *See, e.g.*, Woolley *supra* note 57 ("Over the past century the federal government has carved up the airwaves and given them away to private and special interests ranging from television broadcasters and power utilities to universities and the Catholic Church.").

[138] *See, e.g.*, J.H. SNIDER, WHO OWNS THE AIRWAVES?: FOUR THEORIES OF SPECTRUM PROPERTY RIGHTS 4–5 (New America Foundation, Public Assets Program, Spectrum Series Issue Brief No. 3, 2002) ("everyone who is anyone knows that telecom policy is largely driven by power politics, not policy considerations . . . . Washington's political elites . . . have been transferring tens of billions of dollars of public assets to fat cat special interests."), *at* http://www.newamerica.net/Download_Docs/pdfs/Pub_File_808_1.pdf (last accessed Oct. 11, 2003).

Faustian bargain: "[s]o long as broadcasting is protected from the free market by legislators who depend on TV to get themselves reelected, Congress will continue giving broadcasters special treatment and favors, and consumers will suffer."[140] To boot, many spectrum license holders are former politicians.[141]

Cast in this light, the HDTV fiasco[142] is more of the same thing: broadcasters did not want reallocation of vacant UHF channels, so they encouraged a proceeding to allocate the bandwidth to HDTV.[143] In exchange, regulators received continued control over airwave allocation.[144] In an ironic twist, once assured they would keep the bandwidth, the broadcasters then proceeded to oppose the actual implementation of HDTV.[145]

One could also apply public choice frameworks to other areas within spectrum policy, such as lobbying to lift the spectrum cap that ensured cellular competition[146] or to defeat low power FM radio.[147] While these examples are not

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[139] *See, e.g.*, Powell Broadband Comments, *supra* note 70, at 7 ("Existing users move to block new uses [for spectrum] and line up support for their position, and the new providers are forced to do the same. The ultimate decision is reached as a result of a politicized reactive process.").

[140] Platt, *supra* note 69, at 191; *see also* Hazlett Wireless Article, *supra* note 61, at 536–37 ("The bargain that created government spectrum allocation in 1927, and exists still, is the quid pro quo: lucrative licenses to broadcasters in exchange for content controls. Broadcasters gain rents, and public officials gain some discretion over a powerful and influential component of the press.").

[141] *See, e.g.*, Arthur De Vany, *Implementing a Market-Based Spectrum Policy*, 41 J.L. & ECON. 627, 641 (1998) ("The spectrum is locked away in blocks of bandwidth licensed to a privileged few through methods that are too complex and expensive for all but major corporations or the politically connected to bear (an extraordinary number of broadcast licenses are held by former members of Congress).").

[142] *See supra* notes 64–69.

[143] *See* Hazlett Wireless Article, *supra* note 61, at 351–54.

[144] *See, e.g.*, Spiller & Cardilli, *supra* note 136, at 64 ("[W]hile raising billions by auctioning spare TV frequencies might ensure the agency some fleeting praise during the congressional budget process, continuing control over the allocation of the HDTV spectrum empowers regulators to bargain with the private sector for politically important concessions.").

[145] *See* Hazlett Wireless Article, *supra* note 61, at 351 ("While providing the pressure to initiate the Advanced Television proceeding and the momentum to keep it slowly rolling forward, the TV industry remarkably *opposed* actual creation of HDTV broadcasting at almost every turn."). For a curious defense of the broadcaster's point of view regarding HDTV, see Denise Ulloa, Notes and Comments, *Advanced Television Systems: A Reexamination of Broadcasters' Use of the Spectrum from a Twenty-First Century Perspective*, 16 WHITTIER L. REV. 1155 (1995).

[146] The Cellular Telephone Industry Association (CTIA), composed of the largest wireless carriers, worked for years to defeat a spectrum cap that ensured competition by limiting a cellular carrier to 45 MHz bandwidth in each market. *See, e.g.*, *CTIA Faults FCC Wireless Policies as Anticompetitive*, MOBILE COMM. REP., Jan. 11, 1999, at 1; Jube Shiver, Jr.,

necessarily crude sagas "of procrastination, protectionism, political favors, and outrageous greed"[148] like HDTV, the bottom line is that public choice theories provide a useful framework against which to explain regulatory givings that create an anticommons.

Public choice theory brings a dose of legal realism to the debate, essentially arguing Morris Cohen's point that "[t]his profound human need of controlling and moderating our consumptive demands cannot be left to those whose dominant interest is to stimulate such demands"[149]—be they broadcasters, logging companies, developers, or copyright holders.

2. . . . *But for Some Nuances*

The picture painted above is hopefully bold and convincing. Unfortunately, it is far from complete in its descriptive power.[150] Traditional public choice fails to take into account a number of realities: the distributive and ideological functions of regulation, the practical realities of controlling an industry, and the recent transformations of many regulated industries to the detriment of incumbents.

As a threshold question, one must be cognizant of Mancur Olson's sophisticated depiction of why interest group politics might be a positive good. Referring to the work of economists such as John Commons, Olson highlights the belief not only that different interest groups jockeying for position tend to counterbalance each other,[151] but even the belief among pluralists "that economic

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FCC Gets Rid of Limits on Mobile Airwaves, L.A. TIMES, Nov. 9, 2001, at C3 ("The decision represents a victory for Cingular Wireless, AT&T Wireless Services Inc. and other large mobile carriers.").

147 An unusual alliance between the National Association of Public Broadcasters and National Public Radio destroyed lower power FM radio. *See, e.g.*, BENKLER, *supra* note 82, at 43; THOMAS W. HAZLETT & BRUNO E. VIANI, LEGISLATORS V. REGULATORS: THE CASE OF LOW POWER FM RADIO 4 n.4 (AEI-Brookings Joint Ctr. for Regulatory Studies, Working Paper No. 02-1, 2002), *available at* http://aei-brookings.org/admin/pdffiles/php4b.pdf (last visited Oct. 26, 2003); Arthur Martin, Comment, *Which Public, Whose Interest? The FCC, the Public Interest, and Low-Power Radio*, 38 SAN DIEGO L. REV. 1159, 1196 (2001).

148 Platt, *supra* note 69, at 57.

149 Cohen, *supra* note 83, at 30.

150 *See also* FARBER & FRICKEY, *supra* note 112, at 5 ("The most dramatic, stark versions of public choice have received the most publicity, but they are not necessarily the most useful or even the most representative of current work in the field.").

151 *See* OLSON, *supra* note 118, at 126. Olson states:

> It can scarcely be emphasized too strongly that the analytical pluralists see the results of pressure-group activity as benign, not from any assumption that individuals always deal altruistically with one another, but rather because they think that the different groups will tend to keep each other in check because of the balance of power among them.

Id.

pressure groups were more representative of the people than the legislatures based on territorial representation."[152]

Even if one does not subscribe to this benign account of public choice, one can argue that regulation does fulfill a distributive mandate. In two articles written primarily as a response to Stigler's public choice argument,[153] Richard Posner has argued that regulation effectively performs the function of taxation, and is thus a branch of public finance.[154] Posner discusses how regulators often cross-subsidize certain constituents by setting below market rates,[155] how "interests promoted by regulatory agencies are frequently those of customer groups rather than those of the regulated firms themselves,"[156] and how the same agency often has to regulate different firms with competing interests.[157]

Posner even finds fault in the view that common carrier and public utility regulation has served to benefit incumbents.[158] Nonetheless, he argues that even

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[152] *Id.* at 116. Note also that this point can be extended to argue that different government branches and agencies exert power that attempt to counterbalance each other. For example, in the realm of spectrum allocation, FCC Chairman Powell has noted:

> [W]hen it comes to spectrum policies not only does the Commerce Department have a central role in it with respect to government users, but you have these huge client groups, if you will, at the Department of Defense, the Department of Transportation, that are their own power centers, that have their own jurisdictions, that have their own leadership, that have their own political power, and it's just messy.

Powell CTIA Comments, *supra* note 70, at 6.

[153] *See supra* note 115.

[154] *See* Richard A. Posner, *Taxation by Regulation*, 2 BELL J. EC. & MGMT. SCI. 22, 23 (1971) ("[O]ne of the functions of regulation is to perform distributive and allocative chores usually associated with the taxing or financial branch of government.").

[155] *See id.* at 23–27; *see also* Richard A. Posner, *Theories of Economic Regulation*, 5 BELL J. EC. & MGMT. SCI. 335, 341 (1974) ("A great deal of economic regulation serves the interests of small-business—or nonbusiness—groups, including dairy farmers, pharmacists, barbers, truckers, and, in particular, union labor.") [hereinafter Posner Theories].

[156] Posner Theories, *supra* note 155, at 342; *see also id.* at 353. Posner states:

> The 'consumerist' measures of the last few years—truth in lending and in packaging, automobile safety and emission controls, other pollution and safety regulations, the aggressiveness recently displayed by the previously lethargic Federal Trade Commission—are not an obvious product of interest group pressures, and the proponents of the economic theory of regulation have thus far largely ignored such measures.

Id. (citation omitted).

[157] *See id.* at 342. For example, the FCC has to regulate wireless and wireline carriers, cable, and satellite companies.

[158] *See id.* at 351. Posner argues:

> [C]ontrols over construction of new plant and over abandonment of service, the duty of the common carrier to serve all comers, and the tendency to impose public utility and common carrier controls on industries that sell services rather than goods, are best explained on the

"if we assume that regulation is imposed primarily for the benefit of the regulated firms, it must be shown why other industries have not obtained the same kind of regulation as public utilities and common carriers."[159] Thus, he mounts a full attack on public choice accounts.

Regardless of where one might stand on Posner's beloved economic models,[160] empirical studies show that ideology is a better predictor of legislative votes than economics.[161] Yet, as Farber and Frickey point out, public choice ignores the ideology of politicians and bureaucrats.[162] Ideology, of course, like public choice itself, has a dark side. For example, Kenneth Jackson asks why "[d]espite the fact that the government's leading housing agency openly exhorted segregation throughout the first thirty years of its operation, very few voices were raised against FHA red-lining practices."[163] The reason may be less that the agency was captive to banking or real estate interests, and more that it reflected the segregationist ideology of the time. Indeed, Charles Haar makes the provocative point that ideology interfered with rational functioning of the free market: "the *national federalist agenda* pushed local governments to interfere with the private building industry and, through regulation and taxation, to counter the ordinary operations of the real estate world."[164]

Economics and ideology aside for a minute, the realities of managing a bureaucracy kick in. In his critique of the administrative state, Richard Stewart challenges the critics who assert "with a dogmatic tone that reflects settled opinion, that in carrying out broad legislative directives, agencies unduly favor

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theory that regulation is designed in significant part to confer benefits on politically effective consumer groups.

Id. But see Posner, *supra* note 154, at 29–34 (using the examples of international telegraph and cable television to show how regulation has protected incumbents).

159 Posner, *supra* note 154, at 39.

160 Posner is careful to emphasize that Stigler's point is not some vanilla public interest or capture theory, but rather an "economic theory." Posner Theories, *supra* note 155, at 335. But this seems to be more a function of Posner's affection for objective "rationality." *See, e.g.*, Richard A. Posner, *Rational Choice, Behavioral Economics, and the Law*, 50 STAN. L. REV. 1551 (1998) [hereinafter Posner Rational Choice]; Christine Jolls et al., *Theories and Tropes: A Reply to Posner and Kelman*, 50 STAN. L. REV. 1593, 1597–98 (1998) ("Posner's (undefended but more than implicit) view that an essential part of a good theory is that it be a rational choice theory.").

161 *See* FARBER & FRICKEY, *supra* note 112, at 29.

162 *See id.* at 24 ("[P]ublic choice ignores some other common sense observations about politics. Some crucial features of the political world do not fit the economic model. It does not account for ideological politicians like Reagan and Thatcher. Most notably, it does not account for popular voting.").

163 JACKSON, *supra* note 3, at 214.

164 HAAR, *supra* note 97, at 203 (emphasis added).

organized interests."[165] In fact, Stewart offers an overarching practical explanation as to what might really be going on: given limited resources, regulators are dependent on the industries they regulate for cooperation and information.[166] This problem is exacerbated to the extent agencies must increasingly fund their budgets with user fees from the very companies they regulate.[167] Another practical reality is the need for laws to evolve quickly. For example, there might be a law that is unwise today because it protects a powerful industry. But when the law was originally developed, years or even decades ago, it may have been with the good intentions of protecting a nascent industry.[168] The motivations, then, may not be invidious, just outdated.[169]

Beyond the realities of regulatory implementation, agency capture theories themselves are problematic. In their analysis of the vast changes in regulation of transportation, telecommunications, and energy over the past twenty-five years, Joseph Kearny and Thomas Merrill remark:

> The public choice perspective is also vulnerable insofar as its central premise—that positive regulation is always inferior to market ordering—is usually advanced as an article of faith rather than by empirical demonstration. The history of the great transformation that we have recounted—in which regulatory agencies often led the charge for regulatory reform—should by itself be enough to give pause before one asserts any invariant hypothesis about the behavior of regulators. Contrary to the theory popular in the late 1960s and early 1970s, agencies do not always behave as the hopeless captives of their client industries.[170]

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[165] Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1669, 1684–85 (1975).

[166] *See id.* at 1685–86. Stewart also makes the subtle point that by its very nature a regulatory bureaucracy is focused on controlling an industry, to the detriment of competition among industry players. *See id.*

[167] *See, e.g.*, Yochi J. Dreazen & Deborah Solomon, *Paying for Regulation*, WALL ST. J., Feb. 4, 2003, at A4.

[168] Cable is a classic case in point where a legal regime favorable to cable companies in the 1960s and 1970s was no longer necessary once cable became the dominant transmission medium for video programming. *See* Dibadj, *supra* note 51.

[169] In fact, one of the reasons Farber and Frickey countenance a greater role for judicial oversight is the notion that statutes can become obsolete quickly. *See* FARBER & FRICKEY, *supra* note 112, at 133–39. For a broader discussion of judicial review in the context of addressing the anticommons, see *infra* Part VI.C.1.

[170] Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1406 (1998); *see also* David B. Spence, *Getting Beyond Cynicism: New Theories of the Regulatory State: A Public Choice Progressivism, Continued*, 87 CORNELL L. REV. 397, 436 (2002) (noting that public choice theory does not explain why regulations often burden those being regulated). One notable example is the

In their critique of the nondelegation doctrine, David Spence and Frank Cross argue that the public may in fact be better served by having an administrative bureaucracy.[171] Noting in particular that industry lobbyists typically rush to legislatures for favors, they conclude that "[n]o family of public choice models seems more irrelevant yet is more widely cited than capture models."[172]

One can quibble with Posner, Farber, Stewart, or Kearney. Of course, public choice theories do play an important role in describing how regulatory givings are crafted. But public choice by itself cannot explain everything, and we must bear this in mind when crafting solutions.

B. *Public Interest*

An overarching mandate from Congress to virtually every regulatory agency is to protect the public interest.[173] Given that the agency cannot do everything

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Telecommunications Act of 1996 which sought to restructure local telephone markets to the detriment of entrenched incumbents. *See, e.g.*, Reza Dibadj, *Competitive Debacle in Local Telephony: Is the 1996 Telecommunications Act to Blame?*, 81 WASH. U. L.Q 1, 1–2 (2003); Monroe E. Price & John F. Duffy, *Technological Change and Doctrinal Persistence: Telecommunications Reform in Congress and the Court*, 97 COLUM L. REV. 976, 1012 (1997) (noting the "reengineering of local and long distance telephone markets"). In addition, regulators permitted new innovations such as direct broadcast satellite (DBS) despite the lobby of incumbent broadcasters. *See, e.g.*, Howard A. Shelanski, *The Bending Line Between Conventional "Broadcast" and Wireless "Carriage"*, 97 COLUM. L. REV. 1048, 1063–64 (1997).

[171] David B. Spence & Frank Cross, *A Public Choice Case for the Administrative State*, 89 GEO. L.J. 97, 119 (2000) ("[T]he empirical evidence on independent bureaucracies does not support the claims that independent bureaucrats advance their own interests at the expense of the commonwealth; to the contrary, greater independence may better promote the public interest.").

[172] *Id.* at 121–22. Spence and Cross also aptly note that "capture theory is directly contradictory to the agency policy bias criticism, which suggests that agencies will over-regulate." *Id.* at 122. Spence revisits this argument in Spence, *supra* note 170, at 438 ("The ability to influence legislators' reelection prospects through campaign contributions, issue advertising, and the like, offer well-heeled interest groups much greater leverage over legislators than over agency bureaucrats. . . ."). Spence and Cross' perspective is consistent, for example, with that of Hazlett and Viani who argue that it was Congress, not the FCC, who defeated low power FM radio. *See* HAZLETT & VIANI, *supra* note 147, at 3 ("when the FCC attempted to allocate radio spectrum for low power FM licenses, it was sharply rebuked by Congress").

[173] For instance, under the Communications Act of 1934, the FCC must rule as "public convenience, interest, or necessity requires." 47 U.S.C. § 303 (2000). FCC Commissioner Copps has observed that "the term 'public interest' appears over 110 times in the Communications Act." *See Statement Before the Senate Committee on Commerce, Science, and Transportation*, 108th Cong. 2 (Jan. 14, 2003) (statement of Michael J. Copps, Commissioner, Federal Communications Commission), *at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-230241A4.pdf (last visited Oct. 11, 2003); *see also To*

itself, it effectively delegates its authority to a private party; for instance, logging rights to timber companies, radio licenses to broadcasters, or patents to pharmaceutical companies. In exchange for this "giving," the agency insists that the holder of the right act "as the agent of the 'the public interest' rather than solely in the service of his own self-interest. . . . The opportunity for private profit is intended to serve as a lure to make private operators serve the public."[174]

On one level, all this makes eminent sense. After all, protecting the public should be a central mandate of government agencies, and very often, regulators have the best intentions to help the public.[175] Furthermore, regulation is an inherently dangerous business; in particular, in fast-moving areas such as telecommunications and high technology, it is very difficult for anyone to predict the future.[176] Thus, even when a course of action may look dubious in hindsight, regulators may have begun with every desire to protect the public.[177]

But this belies a number of interpretative quandaries. To begin with, how does one measure "public interest"? Who should determine it? Thomas Hazlett puts it bluntly when he notes that "not even the government's own experts can define what it means, or what action it rules out."[178]

Regulate Radio Communication: Hearings on H.R. 7357 Before the House Comm. on the Merch. Marine and Fisheries, 68th Cong., 1st Sess. 10 (1924). Herbert Hoover commented:

> Radio communication is not to be considered as merely a business carried on for private gain, for private advertisement, or for entertainment of the curious. It is a public concern impressed with the public trust and to be considered primarily from the standpoint of public interest to the same extent and upon the basis of the same general principles as our other public utilities.

Id.

[174] Reich, *supra* note 9, at 745. In some areas, such as influence over programming, the insistence is even more direct. *See, e.g.*, Coase, *supra* note 54, at 38 ("If the aim of government regulation of broadcasting is to influence programming, it is irrelevant to discuss whether regulation is necessitated by the technology of the industry.").

[175] *See, e.g.*, FARBER & FRICKEY, *supra* note 112, at 32; *supra* notes 156–70.

[176] For instance, in his discussion of the Telecommunications Act of 1996, Thomas Krattenmaker has pointed out that "[o]ne reads the new Act in vain for something that reflects Congressional awareness that the FCC may not be omnipotent, its commissioners not omniscient." Thomas G. Krattenmaker, *The Telecommunications Act of 1996*, 29 CONN. L. REV. 123, 173 (1996); *see also* Glen O. Robinson, *On Refusing to Deal With Rivals*, 87 CORNELL L. REV. 1177, 1218 (2002) ("It must have seemed so simple to a Congress accustomed to issuing orders in the manner of Jean Luc Picard of the USS Enterprise: 'make it so number one.' And the FCC, a dutiful if not always fully informed number one, tried to make it so.").

[177] It is precisely to address this issue that I propose regulators adopt a "hedging" strategy where appropriate. *See infra* Part VI.A.

[178] Hazlett Wireless Article, *supra* note 61, at 401; *see also* Hazlett CDEMI, *supra* note 68 ("No one has been able to figure out what that phrase means . . . ."). Indeed, some official pronouncements on the subject tend to be perplexing. For instance, FCC Commissioner

As a result of this fuzziness, the public interest mandate has gone awry. The quid can become not so much between the profit of the private entity and the public's welfare, but rather between the profit of the private entity and the narrow interests of politicians whose authority is ensured by the presence of powerful incumbents.[179]

Lawrence White laments how the public interest "banner" has been used to establish "far too many protectionist, anti-competitive, anti-innovative, inflexible, output-limiting regulatory regimes."[180] Other critics have variously charged agencies such as the FCC of using the public interest standard as "incumbent protectionism"[181] that even justifies "the elimination of competition."[182]

A dumbfounding sense of the public interest infects essentially all areas of regulatory givings to the point where "public interest" can actually become code for "private interest." For instance, in local government law, the court in *Poletown Neighborhood Council v. City of Detroit*[183] allows an entire neighborhood to be condemned in order to clear land for a General Motors plant. The majority notes, quite stunningly, that "[t]he power of eminent domain is to be used in this instance primarily to accomplish the essential *public purposes* of alleviating unemployment and revitalizing the economic base of the community. *The benefit to a private interest is merely incidental.*"[184] Similarly, in the copyright realm,

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Abernathy once commented that "[t]oday the Commission uses its broad discretion in crafting service rules in the public interest to grant far more flexibility *to our licensees*." Kathleen Q. Abernathy, My Vision of the Future of American Spectrum Policy, Remarks Before the Cato Institute's Sixth Annual Technology & Society Conference (Nov. 14, 2002) (emphasis added), *at* http://www.fcc.gov/Speeches/Abernathy/2002/spkqa228.html (last visited Oct. 11, 2003). One is, of course, left wondering how granting more power to a private party necessarily equates with enhanced benefits for the public.

[179] For example, Thomas Hazlett notes:

> Private spectrum rights . . . were "purchased" by broadcaster subsidies to "public interest" concerns, a tax which initially amounted to little more than nominal acquiescence to (and political support for) a federal licensing authority but would, over time, include significant payments to unprofitable local programming, "fairness doctrine" regulation, extensive proof of commitment to "community" in station renewals, and the avoidance of broadcasting content offensive to the political party in power.

Hazlett Rationality, *supra* note 132, at 170; *see also* Shelanski, *supra* note 170, at 1056.

[180] White, *supra* note 55, at 35.

[181] FCC Spectrum Workshop, *supra* note 73, at 248 (statement of Thomas Hazlett).

[182] Herzel, *supra* note 131, at 809.

[183] 304 N.W.2d 455 (Mich. 1981).

[184] *Id.* at 459 (emphasis added). As Justice Fitzgerald notes in dissent, "[t]he condemnation contemplated in the present action goes beyond the scope of the power of eminent domain in that it takes private property for private use." *Id.* at 464 (Fitzgerald, J., dissenting).

one is left wondering how incessant expansion of private rights in copyright law could possibly be in the public interest.[185]

There are also constitutional concerns. Commentators have worried that telecommunications law and intellectual property law often violate the First Amendment by giving license holders undue power to limit the speech of others.[186] What has received scant attention is the fact that vague "public interest" interpretations are a central culprit: after all, how can a court interpret an essentially meaningless standard?[187] The irony, of course, becomes that the standard now allows a private actor to violate someone's First Amendment rights with the state's blessing. There are also serious procedural issues, since administrative agencies are able to make sweeping determinations outside their areas of expertise based on interpretation of the "public interest."[188]

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[185] *See, e.g.*, Okediji, *supra* note 87, at 110–11. Okediji states,

> There has been no express challenge to the fact that the public interest lies at the heart of copyright and trademark protection, although the above mentioned recent legislative enactments—both the process by which they came to fruition as well as their substantive provisions—give reason to pause over Congress' commitment to the public interest or, at the very least, its understanding of the implications of the expansion of copyright law.

Id.

[186] *See, e.g.*, Benkler, *supra* note 64, at 71 ("A system that permits owners of infrastructure to exclude anyone they choose from their infrastructure, or to impose conditions on the use of the infrastructure, creates a cost, in terms of autonomy, for users."); Rubenfeld, *supra* note 76, at 3 ("Copyright law is a kind of giant First Amendment duty-free zone. It flouts basic free speech obligations and standards of review. It routinely produces results that, outside copyright's domain, would be viewed as gross First Amendment violations."); Reich, *supra* note 9, at 762 ("Largess also brings pressure against first amendment rights."); Dibadj, *supra* note 51 (arguing that First Amendment jurisprudence overly protects the commercial speech rights of cable operators, while ignoring the First Amendment rights of subscribers to receive information of their choice).

[187] *See also* Hazlett Wireless Article, *supra* note 61, at 402. Hazlett states,

> The ambiguity of the standard was largely by design. The phrase provided the least constraining constitutional standard for regulation. . . . Putting spectrum regulation under a vague and meaningless standard allowed a creature of Congress to exercise influence over an industry with intense political significance. The standard's malleability offered policy makers maximum degrees of freedom while shielding Congress from the First Amendment, a potential constraint on intervention in the editorial content of the broadcast press.

Id.

[188] For instance, Charles Reich, lamenting administrative trials, notes that the FCC "disclaims any expertise in the area of the antitrust laws, but insists that it can make findings on monopolistic practices without the aid of a court, and deny licenses on the basis of such findings." Reich, *supra* note 9, at 753; *see also* National Broadcasting Co. v. United States, 319 U.S. 190, 223 (1943). The Court found:

> Nothing in the provisions or history of the [Communications] Act lends support to the inference that the [Federal Communications] Commission was denied the power to refuse

The "public interest" standard is thus often used, rather ironically, to protect private interests. It has become an instrument of public choice.[189] In many ways, it is a perfect vehicle to perpetuate regulatory givings and the anticommons. After all, it is politically impractical for government simply to give property away, so it doles out regulatory favors—under the guise of "public interest." These givings, in turn, give certain private parties the right to exclude the rest. Any attempt at administrative law reform must redefine the standard; otherwise "[a]head there stretches—to the farthest horizon—the joyless landscape of the public interest state."[190]

V. CONVENTIONAL POLARITIES

The analysis so far has been somewhat disturbing. I have attempted to illustrate, via both a theoretical framework and illustrative examples, how regulatory givings short of property transfers have created an exclusionary anticommons. Traditional commentary around regulatory reform espouses one of two polarities: either privatizing public assets or declaring a commons. The conventional commentary is schizophrenic, and I will argue, obfuscates the derivation of real solutions.

A. *Privatization*

1. *The Argument*

Privatizing, or what is sometimes euphemistically termed "propertyzing" public assets,[191] is currently very much in vogue. The original ideas can be traced to one dimension of the seminal contributions of Ronald Coase and Harold Demsetz.[192] The theory is that if private parties are given property rights, they

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a license to a station not operating in the "public interest," merely because its misconduct happened to be an unconvicted violation of the anti-trust laws.

Id.

189 *See* Stewart, *supra* note 165, at 1682–83 ("To the extent that belief in an objective 'public interest' remains, the agencies are accused of subverting it in favor of the private interests of regulated and client firms.").

190 Reich, *supra* note 9, at 778; *see also id.* at 771 ("Somehow the idealistic concept of the public interest has summoned up a doctrine monstrous and oppressive."); Glen O. Robinson, *Spectrum Property Law 101*, 41 J.L. & ECON. 609, 613 (1998) ("Like Lewis Carroll's Cheshire cat, the body may disappear, but the grin [of the public interest standard] lingers on.").

191 *See, e.g.*, White, *supra* note 55, at 20.

192 In this Part, I outline the simplistic, commonly held interpretations of Coase and Demsetz. Part V.A.2, *infra*, discusses how their theories have been misunderstood.

will negotiate to strike a bargain via the price mechanism that puts the resources to their most efficient use:

> Land, labor, and capital are all scarce, but this, of itself, does not call for government regulation. It is true that some mechanism has to be employed to decide who, out of the many claimants, should be allowed to use the scarce resource. But the way this is usually done in the American economic system is to employ the *price mechanism*, and this allocates resources to users without the need for government regulation.[193]

A corollary to this theory is that in a world of zero transaction costs,[194] an efficient outcome will attain regardless of who is given the initial entitlement.[195]

Private property averts the major problem of property held in common; namely, it forces individual actors to internalize their costs:

> Communal property rights allow anyone to use the land. Under this system it becomes necessary for all to reach an agreement on land use. But the *externalities* that accompany private ownership of property do not affect all owners, and, generally speaking, it will be necessary for only a few to reach an agreement that takes these effects into account. The cost of negotiating an internalization of these effects is thereby reduced considerably.[196]

The conventional argument thus proceeds as follows: privatizing assets not only allows private parties to put goods to their most efficient use via the price mechanism,[197] but prevents freeloading by forcing interested parties to internalize

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[193] Coase, *supra* note 54, at 14 (emphasis added); *see also id.* at 18 ("the allocation of resources should be determined by the forces of the market rather than as a result of government decisions.").

[194] This world is, of course, unrealistic. *See infra* Part V.A.2.a.

[195] *See* Coase Social Cost, *supra* note 131, at 8 ("But the ultimate result (which maximizes the value of production) is independent of the legal position if the pricing system is assumed to work without cost."); Demsetz, *supra* note 24, at 349 ("There are two striking implications of this process that are true in a world of zero transaction costs. The output mix that results when the exchange of property rights is allowed is efficient and the mix is independent of who is assigned ownership . . . .").

[196] Demsetz, *supra* note 24, at 356–57 (emphasis added). Coase does not use the word "externality," preferring instead the term "harmful effects." *See* R.H. COASE, THE FIRM THE MARKET AND THE LAW 27 (1988).

[197] Even the legal realists acknowledged this as a strong argument in favor of property. *See, e.g.*, Cohen, *supra* note 83, at 19 ("The economic justification of private property is that by means of it a maximum of productivity is promoted.").

their costs.[198] Since this, by and large, has worked successfully for real and private property,[199] why not apply it to public property as well?

Indeed, several distinguished commentators have even made such arguments around the examples discussed in Part III.B. For instance, Milton Friedman has proposed privatizing national forests.[200] William Fischel has argued that since "zoning and other local land use controls are most usefully viewed as collective property rights controlled and exchanged by rational economic agents,"[201] municipalities should be able to sell zoning rights to private parties.[202] In the intellectual property arena, granting indefinite protection becomes de facto privatization.

The most strident contemporary debate on the privatization front, however, is that around spectrum reform. In seeming violation of the plain language of the Communications Act of 1934,[203] several well-known commentators are

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[198] *See, e.g.*, Hardin, *supra* note 21, at 1245 ("The tragedy of the commons as a food basket is averted by private property, or something formally like it.").

[199] *See, e.g.*, Adam D. Thierer, *Solving America's Spectrum Crisis*, TECHKNOWLEDGE (Cato Inst., D.C.), Apr. 18, 2001, ("America does not find itself in the midst of a real estate crisis precisely because markets are allowed to freely calibrate the forces of supply and demand. Property rights, private contracts, and the common law govern disputes over tangible property in America."), *at* http://www.cato.org/tech/tk/010418-tk.html (last visited Oct. 13, 2003).

[200] MILTON FRIEDMAN, CAPITALISM AND FREEDOM 31 (1962); *see also* Stroup & Baden, *supra* note 89, at 305.

[201] FISCHEL, *supra* note 126, at xiii; *see also id.* at 179–84.

[202] Apparently underlying Fischel's argument is his belief that "local authorities attempt to maximize the net worth of the median voter." *Id.* at 127.

[203] Pub. L. No. 73-416, 48 Stat. 1064 (1934) (codified as amended at 47 U.S.C. §§ 151–602). The statute explicitly prohibits ownership and any renewal expectancy. Section 301 states:

> It is the purpose of this [Act], among other things, to maintain the control of the United States over all the channels of radio transmission; and to provide for the use of such channels, *but not the ownership thereof*, by persons for limited periods of time, under licenses granted by Federal authority, and no such license shall be construed to create any right, beyond the terms, conditions, and periods of the license.

47 U.S.C. § 301 (emphasis added). Section 304 provides:

> No station license shall be granted by the Commission until the applicant therefor shall have waived any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise.

advocating granting private property rights to America's airwaves.[204] Apparently having accepted these arguments, the FCC seems headed in this direction as well.[205]

Unfortunately, as seductive as it sounds, the privatization solution is based on fundamental economic misunderstandings. If implemented, its effect would be to make the anticommons even worse.[206]

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47 U.S.C. § 304. Some scholars have argued that de facto property rights have been created despite these statutory prohibitions. *See, e.g.*, Howard A. Shelanski & Peter W. Huber, *Administrative Creation of Property Rights to Radio Spectrum*, 41 J.L. & ECON. 581 (1998); William L. Fishman, *Property Rights, Reliance, and Retroactivity Under the Communications Act of 1934*, 50 FED. COMM. L.J. 1 (1997). *But see* CALABRESE, *supra* note 56, at 5 ("There is a strong case to be made that not even Congress has the authority to 'sell off' the public airwaves for all time."); Norman Orenstein & Michael Calabrese, *A Private Windfall for Public Property*, WASH. POST, Aug. 12, 2003, at A13 ("The contemplated FCC action [to privatize the airwaves] could result in the biggest special interest windfall at the expense of American taxpayers in history.").

[204] *See, e.g.*, GERALD R. FAULHABER & DAVID J. FARBER, SPECTRUM MANAGEMENT: PROPERTY RIGHTS, MARKETS, AND THE COMMONS 19 (AEI-Brookings Joint Ctr. for Regulatory Studies, Working Paper No. 02-12, 2002) (advocating fee simple ownership coupled with a non-interference easement), *available at* http://aei-brookings.org/admin/ pdffiles/php84.pdf (last visited Oct. 29, 2003); Hazlett Wireless Article, *supra* note 61, at 405 ("The enabling policy is simply private property in radio spectrum. Such a regime would allow for the efficient definition of rights, adjudication of disputes (including interference), and easy entry into unoccupied property.").

[205] The latest FCC pronouncement is tilted heavily toward privatization in the most attractive bands—those between 3 MHz and 3 GHz that are both energy efficient and able to penetrate walls. *See* FEDERAL COMMUNICATIONS COMMISSION, SPECTRUM POLICY TASK FORCE REPORT 38 (ET Docket No. 02-135, Nov. 2002) ("These variables suggest that in the lower portion of the radio spectrum, particularly bands below 5 GHz, the Commission should focus primarily, though not exclusively, on using the exclusive use model."), *at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-228542A1.pdf (last visited Oct. 11, 2003) [hereinafter FCC SPTF Report]. On the other hand, the FCC favors a commons model in the higher, less attractive frequencies. *See id.* at 39 ("The variables described above tend to tilt in favor of expanded use of the commons model in higher spectrum bands, particularly above 50 GHz, based on the physical characteristics of the spectrum itself."); *see also* FEDERAL COMMUNICATIONS COMMISSION, REPORT OF THE SPECTRUM RIGHTS AND RESPONSIBILITIES WORKING GROUP 17–21 (Nov. 15, 2002), *at* http://www.fcc.gov/sptf/files/SRRWG FinalReport.pdf (last visited Oct. 11, 2003) [hereinafter FCC Spectrum Rights Report]; KENNETH R. CARTER ET AL., UNLICENSED AND UNSHACKLED: A JOINT OSP-OET WHITE PAPER ON UNLICENSED DEVICES AND THEIR REGULATORY ISSUES (Fed. Communications Comm'n, OSP Working Paper No. 39, 2003), http://hraunfoss.fcc.gov/edocs_public /attachmatch/DOC-234741A1.pdf (last visited Oct. 12, 2003).

[206] *See also* James R. Rasband, *The Public Trust Doctrine: A Tragedy of the Common Law*, 77 TEX. L. REV. 1335, 1358 (1999) (reviewing BONNIE J. MCCAY, OYSTER WARS AND THE PUBLIC TRUST: PROPERTY, LAW, AND ECOLOGY IN NEW JERSEY HISTORY (1998)) (commenting that privatization is "the most anticommons solution").

2. *Deconstructing the Argument*

a. *Those Pesky Transaction Costs*

It is startling that the overwhelming majority of commentary is focused on the first part of Coase's landmark article, *The Problem of Social Cost*, where he highlights a theoretical world of "perfect competition"[207] and zero transaction costs.[208] Unfortunately, economic reality is much more messy, which is perhaps why most economists either misread or duck the issue of transaction costs.[209] In addition, privatization advocates have conveniently found ammunition in the first part of the essay, whereas when the article is read in toto, a different picture emerges.[210]

Transaction costs include "search and information costs, bargaining and decision costs, policing and enforcement costs."[211] Imagine, for instance, if

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[207] *See* Coase Social Cost, *supra* note 131, at 3.

[208] *See supra* note 195.

[209] As Coase himself later lamented,

> [t]he world of zero transaction costs . . . is the world of modern economic analysis, and economists therefore feel quite comfortable handling the intellectual problems it poses, remote from the real world though they may be. . . . A conclusion so depressing is hardly likely to be welcomed, and the resistance that my analysis has encountered is therefore quite natural.

Coase, *supra* note 196, at 15; *see also* Carl J. Dahlman, *The Problem of Externality*, 22 J.L. & ECON. 141, 161 (1979) ("[O]ur sad state of affairs is rather due to positive transaction costs and imperfect information."). An analogy can be drawn to the seminal work of Modigliani and Miller exploring the effect of capital structure on the cost of capital. While postulating that in a world of zero taxation, capital structure does not matter, they are careful to note that "drastic simplifications have been necessary in order to come to grips with the problem at all. Having served their purpose they can now be relaxed in the direction of greater realism and relevance, a task in which we hope others interested in this area will wish to share." Franco Modigliani & Merton H. Miller, *The Cost of Capital, Corporation Finance and the Theory of Investment*, 48 AM. ECON. REV. 261, 296 (1958). Of course, we live in a world of taxation, such that debt financing (whose interest is deductible from income) is often used as financing strategy.

[210] Commenting on Coase's *Problem of Social Cost*, Oliver Williamson notes that "this important and influential paper is in two parts: the first part features frictionlessness; the second qualifies the earlier discussion to make allowance for frictions. Much of the follow-on literature, including franchise bidding, is largely or wholly preoccupied with frictionlessness or deals with frictions in a limited or sanguine way." Oliver E. Williamson, *Franchise Bidding for Natural Monopolies—In General and with Respect to CATV*, 7 BELL J. ECON. 73, 74 n.2 (1976); *see also* Dahlman, *supra* note 209, at 158 ("The immediate implication, so often overlooked in subsequent writings on Coase's work, is that when there are transaction costs and informational differences between traders, then it may very well matter to whom liabilities and rights are assigned.").

[211] Dahlman, *supra* note 209, at 148.

zoning rights were privatized as William Fischel has suggested.[212] For the right to be put to its most efficient use,[213] market transactors must have information about precisely who owns which right. They then have to find each owner and negotiate to use the right—assuming, of course, that no right owner will "hold out" for a better bargain.[214] Then, even though the idea is to privatize, some authority figure needs to make sure the zoning right is being respected. At each step, then, the unfortunate reality of transaction costs challenges an elegant theory.[215]

In the context of forest management, Richard Stroup and John Baden have discussed that "among potential externalities (aspects difficult to contract for) are some of the effects of flood control, watershed provision, weather modification, animal habitat, biotic diversity, and environmental buffering."[216] Yochai Benkler has made an analogous argument to argue against the privatization of spectrum rights,[217] noting more broadly how:

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[212] *See* FISCHEL, *supra* note 126.

[213] Here I ignore the critical issue of equity which I return to in Part V.A.2.b.

[214] *See, e.g.*, OLSON, *supra* note 118, at 176.

[215] *See also* Demsetz, *supra* note 24, at 354. Demsetz notes:

> It is conceivable that those who own these rights, i.e., every member of the community, can agree to curtail the rate at which they work the lands if negotiating and policing costs are zero. Each can agree to abridge his rights. It is obvious that the costs of reaching such an agreement will not be zero. What is not obvious is just how large these costs may be.

Id.

[216] Stroup and Baden, *supra* note 89, at 307.

[217] *See* Yochai Benkler, *Overcoming Agoraphobia: Building the Commons of the Digitally Networked Environment*, 11 HARV. J.L. & TECH. 287, 346 (1998). Benkler notes:

> These costs are associated with deciding how to use the transmission rights, including costs of collecting information about what the highest value use is at a given time, processing that information, and deciding to switch uses when appropriate. They are continually incurred by the transmission rights owner and by putative purchasers of transmission rights to determine what the highest value of transmissions will be.

Id. In addition to the costs Benkler outlines, there are also the costs of switching between different types of equipment depending on what use the spectrum is put to. A careful reading of the articles that are simplistically assumed to advocate privatization also points to the complications of transaction costs. *See, e.g.*, Arthur S. De Vany et al., *A Property System for Market Allocation of the Electromagnetic Spectrum: A Legal-Economic-Engineering Study*, 21 STAN. L. REV. 1499, 1507–08 (1969) ("Exchanging rights is a costly process; it includes the costs for both buyers and sellers of searching out, negotiating, and enforcing mutually beneficial exchange opportunities."); Jora R. Minasian, *Property Rights in Radiation: An Alternative Approach to Radio Frequency Allocation*, 18 J.L. & ECON. 221, 269 (1975). Minasian observes:

> In order to demonstrate the mechanism by which such rights, once assigned, would be reconstituted in a market, it was assumed that emission rights could be defined in terms

> Our entire relationship with our physical surroundings would likely be altered fundamentally if, in order to leave our homes, we had to transact constantly with others, having a superior right to decide whether we could or could not take the route of our choice, at the time of our choice, using the vehicle of our choice.[218]

Enforcement is also problematic. The conventional reaction is simply to assume that common law will protect rights,[219] and antitrust law will curb monopoly.[220] Both assertions miss the mark. It is woefully unclear how a generalist judiciary has either the time or the expertise to police everything from zoning rights to spectrum. Some scholars have even suggested that such proposals misunderstand the essence of common law.[221]

Similarly, despite antitrust law, many industries—such as airlines, banks, cable companies—have become increasingly concentrated, to the detriment of consumers.[222] In the words of the trade press describing the evolution of the wireless industry, industries left to the devices of antitrust law tend to engage in a

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> of single-valued power levels—that signal levels did not vary—and that there was no cost associated with enforcing these rights.

Id.

[218] Benkler, *supra* note 217, at 389; *see also* Lawrence Lessig, Commons and Code, Keynote Address at the Fordham Intellectual Property, Media, & Entertainment Law Journal's Seventh Annual Symposium: First Amendment and the Media (Feb. 9, 1999), *in* 9 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 405, 406 (1999).

[219] For example, Pablo Spiller and Carlo Cardilli have made this argument in the context of spectrum rights: "Once a property rights system is implemented, interference could be handled through access to tort law. As long as individuals or entities may be sued and fined for trespassing on another's spectrum rights, spectrum users will have incentives to respect the rights of their spectrum neighbors." Spiller & Cardilli, *supra* note 136, at 63–64 .

[220] *See, e.g.*, White, *supra* note 55, at 36 ("The antitrust laws would apply to spectrum markets, just as they apply to most other markets in the U.S."); Hazlett Wireless Article, *supra* note 61, at 405 ("Monopoly problems would continue to be the domain of antitrust law."). Surprisingly, in one article Hazlett even assumes that "[s]pectrum use has no tendency to natural monopoly . . . ." Thomas W. Hazlett, *Spectrum Flash Dance: Eli Noam's Proposal for "Open Access" to Radio Waves*, 41 J.L. & ECON. 805, 816 (1998). He offers no explanation, however, of how spectrum is any different from other network infrastructure that tends toward monopoly.

[221] For instance, Tom Bell has insightfully critiqued Peter Huber's simplistic reliance on common law to reform telecommunications, noting that Huber "too readily embraces a variety of rules that would both clog common law processes and contradict common law principles." Tom W. Bell, *Public Choice and Public Law: The Common Law in Cyberspace*, 97 MICH. L. REV. 1746, 1770 (1999) (reviewing PETER HUBER, LAW AND DISORDER IN CYBERSPACE: ABOLISH THE FCC AND LET COMMON LAW RULE THE TELECOSM (1997)).

[222] *See* Reza Dibadj, *Deregulation: A Tragedy in Three Acts*, WASH. POST, Sept. 13, 2003, at A21.

"horribly self-destructive orgy of affiliation, branding and mergers."[223] Professors Jean-Jacques Laffont and Jean Tirole use the example of New Zealand, where telecommunications regulatory oversight was abolished, then reinstated,[224] to demonstrate the "difficulty of ensuring competition in the absence of regulation."[225]

The most sophisticated advocates of privatization, who concede that regulatory oversight would still be needed, gloss over the costs of such mechanisms or even whether deploying such "public" mechanisms eviscerates the core of the privatization argument.[226] As Stroup and Baden point out, "a simple market solution, unbounded by continuing government intervention of some sort, would involve serious externality problems . . . ."[227]

Perhaps the ultimate reason why transaction costs are important is devastatingly simple: if we lived in a world of zero (or even low) transaction costs, then the modern firm would not even exist.[228] After all, if business could be transacted via the price mechanism, there would be no need for organizations to have developed alongside markets.[229] Indeed, an entire branch of economics,

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[223] John Sullivan, *Be Careful About Losing Spectrum Caps*, WIRELESS INSIDER, Nov. 12, 2001, at 1. For a discussion of the anticompetitive effects of mergers, see, e.g., John W. Berresford, *Mergers in Mobile Telecommunications Services: A Primer on the Analysis of Their Competitive Effects*, 48 FED. COMM. L.J. 247 (1996). For a behavioral explanation, see *infra* notes 257–65.

[224] In late 2001, the government of New Zealand created the role of Telecommunications Commissioner. *See* Press Release, New Zealand Ministry of Economic Development, Landmark Telecommunications Act Passed (Dec. 18, 2001), http://www.med.govt.nz/pbt/telecom/ minister20011218a.html (last visited Sept. 15, 2003). This action was partly in response to evidence that the incumbent, Telecom, was abusing its market power to the detriment of new entrants such as Clear. *See, e.g.*, Liam Dann, *Change a Way of Life for "Other Woman,"* SUNDAY STAR-TIMES (Auckland, New Zealand), Mar. 3, 2002, at 4.

[225] JEAN-JACQUES LAFFONT & JEAN TIROLE, COMPETITION IN TELECOMMUNICATIONS 34 (2000).

[226] *See, e.g.*, White, *supra* note 55, at 32 (admitting the need for a national spectrum agency—including to maintain registry, enforce interference issues, and serve as a vehicle for international coordination and standards development).

[227] Stroup & Baden, *supra* note 89, at 312.

[228] *See, e.g.*, Coase *supra* note 196, at 7 ("But perhaps the most important adaptation to the existence of transaction costs is the emergence of the firm.").

[229] Beyond markets and organizational hierarchies, a third mode of organization called "peer production" may be emerging. *See* Yochai Benkler, *Coase's Penguin, or, Linux and* The Nature of the Firm, 112 YALE L.J. 369 (2002) (extrapolating beyond the open source software movement, which is considered to be the first form of peer production), *available at* http://benkler.org/CoasesPenguin.PDF (last visited Oct. 11, 2003). In an earlier article, Benkler similarly posits that decentralization of information production is an alternative to privatization or direct regulation of information policy. *See* Benkler, *supra* note 51, at 27.

transaction cost economics (TCE)—building on Coase's insights[230]—has developed in response to this reality.[231]

In his TCE study of opportunistic behavior by cable companies in franchise renewals, Oliver Williamson observes that the traditional

> "economic approach to law" . . . is characteristically deficient in microanalytic respects. . . . As I have observed elsewhere, this tradition relies heavily on the fiction of frictionless and/or invokes transaction cost considerations selectively. However powerful and useful it is for classroom purposes and as a check against loose public policy prescriptions, *it easily leads to extreme and untenable "solutions."*[232]

Coase's *The Problem of Social Cost* plainly states that the "argument has proceeded up to this point on the assumption . . . that there were no costs involved in carrying out market transactions. This is, of course, *a very unrealistic assumption.*"[233] In a later book, Coase points out quite clearly that the "world of zero transaction costs has often been described as a Coasian world. *Nothing could be further from the truth.* It is the world of modern economic theory, one which I was hoping to persuade economists to leave."[234]

Coase suggests that future theories should be "incorporating transaction costs into the analysis, since so much that happens in the economic system is designed either to reduce transaction costs or to make possible what their existence prevents."[235] He even postulates:

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[230] *See, e.g.*, R.H. Coase, *The Nature of the Firm*, 4 ECONOMICA 386, 389 (1937) ("It can, I think, be assumed that the distinguishing mark of the firm is the supersession of the price mechanism.") [hereinafter Coase NOF]; Coase Social Cost, *supra* note 131, at 16 ("It does not, of course, follow that the administrative costs of organising a transaction through a firm are inevitably less than the costs of the market transactions which are superseded.").

[231] For an overview of transaction cost economics, see Christopher S. Boerner & Jeffrey T. Macher, Transaction Cost Economics: An Assessment of Empirical Research in the Social Sciences 3–4 (2001) (unpublished manuscript) ("The basic insight of TCE is to recognize that in a world of positive transaction costs, exchange agreements must be governed, and that, contingent on the transactions to be organized, some forms of governance are better than others."), *at* http://www.ssu.missouri.edu/Faculty/Msykuta/Courses/AgEcon415/Macher%20and%20Boerner.pdf (last visited Oct. 11, 2003); Howard A. Shelanski & Peter G. Klein, *Empirical Research in Transaction Cost Economics: A Review and Assessment*, 11 J.L. ECON. & ORG. 335, 337 (1995) ("TCE tries to explain how trading partners choose, from the set of feasible institutional alternatives, the arrangement that offers protection for their relationship-specific investments at the lowest total cost.").

[232] Williamson, *supra* note 210, at 74 (emphasis added) (citation omitted).

[233] Coase Social Cost, *supra* note 131, at 15 (emphasis added).

[234] Coase, *supra* note 196, at 174 (emphasis added).

[235] *Id.* at 30. He admits that his own analysis on this front is "extremely inadequate." Coase Social Cost, *supra* note 131, at 18.

> [T]here is no reason why, on occasion, such governmental administrative regulation should not lead to an improvement in economic efficiency. This would seem particularly likely when . . . a large number of people are involved and in which therefore the costs of handling the problem through the market or the firm may be high.[236]

In fact, the difficult problems—those we are concerned with here—are precisely those that are messy and involve multiple constituents. They are those where government regulation may actually pose fewer transaction costs than purely private market transactions. What is fascinating is that Coase's logic unwittingly leads in the same direction as that espoused by the leading twentieth-century welfare economist, A.C. Pigou,[237] whose work Coase initially set out to refute.[238] The economics literature virtually ignores this point.[239]

Simply put, basing policy on a world of zero transaction costs, is a canard.

b. *What About Equity?*

Transaction costs, whose analysis is based on efficiency grounds, make the privatization solution to the anticommons problematic. Another blow to privatization emerges when equity considerations are incorporated.

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[236] Coase Social Cost, *supra* note 131, at 18; *see also* Coase, *supra* note 54, at 18. Coase states:

> This discussion should not be taken to imply that an administrative allocation of resources is inevitably worse than an allocation by means of the price mechanism. The operation of the market is not itself costless, and, if the costs of operating the market exceeded the costs of running the agency by a sufficiently large amount, we might be willing to acquiesce in the malallocation of resources resulting from the agency's lack of knowledge, inflexibility, and exposure to political pressure.

Id.

[237] *See* generally A.C. PIGOU, THE ECONOMICS OF WELFARE (4th ed. 1932).

[238] *See* Coase Social Cost, *supra* note 131, at 28–29.

[239] Carl Dahlman and William Fischel are the rare economists who have made a similar observation. *See* Dahlman, *supra* note 209, at 160. Dahlman states:

> [T]he Coase analysis implies one of two corrective measures: (i) find out if there is a feasible way to decrease the costs of transacting between market agents through government action, or (ii) *if* that is not possible, the analysis would suggest employing taxes, legislative action, standards, prohibitions, agencies, or whatever else can be thought of that will achieve the allocation of resources we have already decided is preferred. . . . In this way, the Coase recommendations arrive at exactly the same policy implications that the correct Pigou analysis does . . . .

Id.; *see also* FISCHEL, *supra* note 126, at 121 ("Despite my claim that there is little fundamentally separating Pigovian from Coasian analysis, two schools of thought on this persist.").

Proponents of privatization, who mistakenly use Coase's *The Problem of Social Cost* as their treatise,[240] ignore the fact that Coase's analysis is prefaced by four all important words: "questions of equity apart."[241] Arguably, the greatest weakness of traditional economic analysis is that in its fascination with utilitarianism and efficiency, it ignores issues of justice that are central to our jurisprudence.[242] For example, what is to be done with citizens who do not have the financial means to participate in the privatization of our public assets? What about those values we hold dear, but that are not quantifiable: what price on clean air, recreational uses, or a diverse community?[243] These are the troubling questions that should haunt privatization advocates.

As Joseph Tomain has pointed out in his critique of William Fischel's defense of private markets for land use control:[244] "Fischel never answers the questions: Where do the excluded go? Are they to be denied community? Or must they settle for a substandard community?"[245] In the context of communications law, Cass Sunstein has noted that the "most important point is that a market system may fail to provide a system of communication that is

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[240] *See* Coase Social Cost, *supra* note 131, at 3; *supra* notes 195, 209–10.

[241] Coase Social Cost, *supra* note 131, at 19.

[242] *Cf.* Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1510–13 (1998) (discussing bans on mutually desired trades such as usurious lending, price gouging, and ticket scalping that are based on standards of perceived fairness).

[243] This weakness is also a reason why better regulations have not been enacted to protect our forests. *See, e.g.*, Stroup & Baden, *supra* note 89, at 306 ("We know, for example, how much people are willing to sacrifice for a thousand board feet of lumber of a given species and grade, but how much *would* they pay for a day's access to a wilderness area? In the latter case we have only rough estimates."); Charles F. Wilkinson, *The Public Trust Doctrine in Public Land Law*, 14 U.C. DAVIS L. REV. 269, 269 (1980) (observing that our public lands "contain economic wealth that is literally beyond our capacity to measure").

[244] *See* FISCHEL, *supra* note 126, at xiii; *see also id.* at 179–84.

[245] Joseph P. Tomain, *On Local Autonomy: Discontinuity and Convergence*, 55 U. CIN. L. REV. 399, 413 (1986) (reviewing WILLIAM FISCHEL, THE ECONOMICS OF ZONING LAW: A PROPERTY RIGHTS APPROACH TO AMERICAN LAND USE CONTROLS (1985)). Fischel himself seems somewhat ambivalent. On the one hand, he argues:

> [T]he wealth effect of zoning accrues chiefly to some of the wealthiest members of our society. . . . I argue that the free entitlements that zoning offers to suburban residents are like offers of free memberships to the best country clubs to the rich, while all others must pay to get in.

FISCHEL, *supra* note 126, at 137. On the other hand, he notes understandingly that "land use controls are an inexpensive means of achieving social controls." *Id.* at 335.

well-adapted to a democratic social order."[246] Needless to say, privatization in the context of telecommunications and intellectual property also raises significant First Amendment concerns.[247]

Interestingly enough, the equity argument is sometimes flipped to argue that it would be unfair to ask firms to make investments unless they are given property rights in public assets such as the airwaves. The traditional formulation of this argument is that privatization encourages investment because it provides certainty; of course, no evidence is provided as to why.[248] Indeed, economists who have studied the issue come to the opposite conclusion. As Louis Kaplow observes:

> For purposes of analyzing risk and incentive issues, the source of the uncertainty is largely irrelevant. A private actor should be indifferent as to whether a given probability of loss will result from the action of competitors, an act of government, or an act of God, except to the extent that the source of the risk will affect the likelihood of compensation or other relief.[249]

As Eli Noam succinctly points out "[u]ncertainty exists in every business, and no firm can control every input."[250]

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[246] Cass R. Sunstein, *Television and the Public Interest*, 88 CAL. L. REV. 499, 520 (2000). Sunstein also discusses a variety of problems that impinge on consumer sovereignty, leading to an underproduction of public goods. *See id.* at 514–17; *see also* Ronald J. Krotoszynski & A. Richard M. Blaiklock, *Enhancing the Spectrum: Media Power, Democracy, and the Marketplace of Ideas*, 2000 U. ILL. L. REV. 813, 887 ("Given the dependency of our democratic practices on this medium [television], it seems reasonable to ask whether it should be for sale to the highest bidder, for such uses and for such purposes as the buyer might require. We think it reasonably self-evident that this proposition must be rejected.").

[247] *See, e.g.*, Benkler, *supra* note 64, at 26–27 ("The information economy has made things more difficult. To create property rights in this economy, government must often prohibit speech."); *supra* note 186.

[248] *See, e.g.*, FCC Spectrum Rights Report, *supra* note 205, at 6 ("Parties who advocated granting exclusive rights to licensees argue that such an approach encourages investment."); Howard A. Shelanski, *Competition and Deployment of New Technology in U.S. Telecommunications*, 2000 U. CHI. LEGAL F. 85, 89 (noting that to oppose the 45 MHz spectrum cap, incumbent carriers argued that "without such consolidation, they would be uncertain of having sufficient spectrum capacity for the new services and hence would find it too risky to invest in developing the new technology").

[249] Louis Kaplow, *An Economic Analysis of Legal Transitions*, 99 HARV. L. REV. 509, 534–35 (1986) (footnote omitted). *Cf.* Lawrence Blume & Daniel L. Rubinfeld, *Compensation for Takings: An Economic Analysis*, 72 CAL. L. REV. 569, 573 (1984) (on the basis of efficiency alone, concluding that government compensation for takings should be paid only "in those cases that entail relatively large losses to those unable to insure against such losses").

[250] Eli Noam, *Spectrum Auctions: Yesterday's Heresy, Today's Orthodoxy, Tomorrow's Anachronism. Taking the Next Step to Open Spectrum Access*, 41 J.L. & ECON. 765, 784 (1998).

Thus, privatization ignores equity as a vital component of public policy. To boot, arguing that the only equitable incentive for firms to invest is to give them free reign of public assets is a red herring. One may or may not agree with Coase's point that "problems of welfare economics must ultimately dissolve into a study of aesthetics and morals."[251] But at least the law shouldn't ignore "aesthetics and morals."

c. *Behavioral Economics*

As if transaction costs and equity considerations were not enough to spoil the privatization party, there is also the thorny issue of human behavior.

Recent work by economists is casting doubt on the notion that economic actors are, by definition, rational utility maximizers.[252] Behavioral economics fundamentally relies on real-world experiments to ascertain how real people behave. Indeed, the core of the behavioral argument is that "assumptions about behavior should accord with empirically validated descriptions of actual behavior."[253] One behavioral trait, directly applicable to the privatization argument, is the "endowment effect" which states that people often demand more to give up a good than to purchase it.[254] This casts strong doubt on the idea that

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[251] Coase Social Cost, *supra* note 131, at 43.

[252] For an overview of behavioral economics in the law and economics context, see generally Jolls et al., *supra* note 242. For critiques of this approach, see Mark Kelman, *Behavioral Economics as Part of a Rhetorical Duet: A Response to Jolls, Sunstein, and Thaler*, 50 STAN. L. REV. 1577, 1586 (1998) ("[B]ehavioral economics can better be seen as a series of particular counterstories, formed largely in parasitic reaction to the unduly self-confident predictions of rational choice theorists, than as an alternative general theory of human behavior."); Posner Rational Choice, *supra* note 160, at 1559 (arguing for rational choice theory since with behavioral theories, "descriptive accuracy is purchased at a price, the price being loss of predictive power"). Note that behavioral models, though gaining in momentum, are not new. Mancur Olson, for instance, used a behavioral argument to discuss why states have had to resort to mandatory taxation, even though it would be rational for citizens to pay them voluntarily. *See* OLSON, *supra* note 118, at 13 ("But despite the force of patriotism, the appeal of the national ideology, the bond of a common culture, and the indispensability of the system of law and order, no major state in modern history has been able to support itself through voluntary dues or contributions.").

[253] Jolls et al., *supra* note 242, at 1489. Notably, in the emerging vocabulary of behavioral economics, they exhibit "bounded rationality," "bounded willpower," and "bounded self-interest." *See id.* at 1477–79; *see also* Richard Craswell, *Passing on the Costs of Legal Rules: Efficiency and Distribution in Buyer-Seller Relationships*, 43 STAN. L. REV. 361, 385–90 (1991) (discussing how wealth effects and framing effects distort consumer behavior). Note that leading behavioralists are careful not to call this behavior simply "irrational." *See* Jolls et al., *supra* note 160, at 1594.

[254] The classic experiment in this context surrounds the exchange of coffee mugs. People who were initially given the mugs wanted twice as much to give them up as those who didn't have a mug were willing to pay. *See* Jolls et al., *supra* note 242, at 1483–85. This also explains

rights will be put to their most efficient use regardless of their initial allocation—a notion which privatization advocates are fond of citing.[255] As Jennifer Arlen has pointed out:

> The endowment effect challenges the fundamental assumption of economics that, absent wealth effects, an individual's maximum willingness to pay for a good should equal his minimum sale price. *This assumption is at the heart of the conclusion that in markets with de minimis transactions costs, commodities will flow to the people who value them most.*[256]

Behavioral quirks also extend to firms as market actors. Many management teams desperately want to "build an empire" even where a rational utility maximizer would not. One article in the business press sums up the situation nicely: "All too often nowadays, corporate boards seem eager to rubber-stamp deals negotiated by empire-building CEOs."[257] It is why many companies, for example, overpay for acquisitions.[258] It has also led companies in network industries to try to build large proprietary networks,[259] something which even the most sophisticated commons advocates view as "rational."[260] As the fate of companies like Apple in

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why parties do not negotiate after a court judgment is rendered even though it could be more efficient to do so. *See id.* at 1497–1501.

[255] *See supra* note 195.

[256] Jennifer Arlen, Comment, *The Future of Behavioral Economic Analysis of Law*, 51 VAND. L. REV. 1765, 1771 (1998) (emphasis added); *see also* Jolls et al., *supra* note 242, at 1483 ("[E]ven when transaction costs and wealth effects are known to be zero, initial entitlements alter the final allocation of resources."); Jolls et al., *supra* note 160, at 1602 ("The behavioral economic analysis is that the granting of property rights will affect the allocation of those rights.").

[257] Michael Arndt, *Let's Talk Turkeys*, BUS. WK., Dec. 11, 2000, at 44.

[258] *See, e.g.*, Robert G. Eccles et al., *Are You Paying Too Much for that Acquisition?*, HARV. BUS. REV., July–Aug. 1999, at 136 ("Despite 30 years of evidence demonstrating that most acquisitions don't create value for the acquiring company's shareholders, executives continue to make more deals, and bigger deals, every year.").

[259] The rational argument would be that since the value of a network increases with user and content variety, network operators such as cable companies have an economic incentive to open their networks to third parties even without regulation. *See, e.g.*, James B. Speta, *Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms*, 17 YALE J. ON REG. 39 (2000). Unfortunately, as the behavior of the cable companies to build closed networks makes clear, this argument simply doesn't accord with reality. *See* Dibadj, *supra* note 51. For an overall discussion of network economic effects, see generally Mark A. Lemley & David McGowan, *Legal Implications of Network Economic Effects*, 86 CAL. L. REV. 479 (1998).

[260] *See, e.g.*, BENKLER, *supra* note 82, at 6 ("Cable operators act rationally when they design their broadband systems to favor their own ISP and their own content, but their private rationality leads to public loss."). The reality is that their private irrationality leads to public *and private* loss.

computers[261] and Wang in word processing[262] shows, this strategy typically ends up "irrationally" destroying shareholder value—but CEOs continue to try.

In the context of environmental regulation, Timothy Malloy captures reality when he notes that "what goes on inside the firm matters, and regulators should pay attention to this point in designing and implementing regulation,"[263] adding, "[t]he critical point here is that even a perfectly efficient, profit-maximizing firm will not consist of a group of profit-maximizing employees and managers. The sheer size and complexity of the modern firm virtually precludes it from using profit-maximization as the driving goal for every firm participant."[264] Regulation could even serve as a proxy for shareholder oversight, which has become very difficult given the dispersion of ownership in corporate America.[265]

The insights of behavioral economics have potentially far-reaching implications in the context of regulatory givings. That regulatory givings create an anticommons that excludes the polity should hopefully be clear.[266] That regulatory givings can hurt the very private interests they are designed to protect is, however, supremely ironic. Privatization of a portion of the airwaves has already contributed to a "speculative frenzy"[267] over bits of spectrum that has sent several wireless providers into bankruptcy. Some economists have argued that general federal timber management policies, by increasing cheap supply, actually hurt the very private companies they were supposed to benefit.[268] It is also unclear what the long-term effects of exclusionary zoning will be on the social stability of those who live behind the gates. The perhaps surprising implication is

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[261] *See, e.g.*, *Sculley Placed All Bets on the Proprietary Mac Way*, INFOWORLD, Feb. 17, 1997 (noting with some amusement Sculley's 1987 statement of how unimportant compatibility with IBM's PC standard would be).

[262] *See, e.g.*, *The Innovator that Quit Innovating*, U.S. NEWS & WORLD REP., Aug. 31–Sept. 7, 1992, at 23 (observing that "Wang . . . stuck with its own proprietary software on its minis after cheaper models running Unix, an industry standard operating system, caught on").

[263] Timothy F. Malloy, *Regulating by Incentives: Myths, Models, and Micromarkets*, 80 TEX. L. REV. 531, 536 (2002).

[264] *Id.* at 558.

[265] *Cf.* Demsetz, *supra* note 24, at 358. Demsetz writes:

> Hence a delegation of authority for most decisions takes place and, for most of these, a small management group becomes the *de facto* owners. Effective ownership, i.e., effective control of property, is thus legally concentrated in management's hands. . . . Shareholders are essentially lenders of equity capital and not owners . . . .

Id.

[266] *See supra* Part III.

[267] Woolley, *supra* note 57, at 150.

[268] *See* Roberts, *supra* note 92, at 47.

that revamping the regulatory state to curb unnecessary givings[269] can actually protect the beneficiaries of regulatory largesse from themselves.[270]

The field of behavioral economics is still in its infancy,[271] with its implications likely refined and debated in the years to come.[272] It is very unlikely to supplant traditional economic theory, but will rather complement and enrich it.[273] One thing can be stated with reasonable certainty, however: often irrational market actors cast serious doubt on the feasibility of privatizing public rights. Coase himself observes, somewhat somberly:

> The rational utility maximizer of economic theory bears no resemblance to the man on the Clapham bus or, indeed, to any man (or woman) on any bus. There is no reason to suppose that most human beings are engaged in maximizing anything unless it be unhappiness, and even this with incomplete success.[274]

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[269] *See infra* Part VI.

[270] There is even some support for this proposition in early twentieth-century economics literature. *See* Frank H. Knight, *The Ethics of Competition*, 37 Q.J. ECON. 579, 593 (1923) ("Under freedom all that would stand in the way of a universal drift toward monopoly is the fortunate limitations of human nature, which prevent the necessary organization from being feasible or make its costs larger than the monopoly gains which it might secure."). In discussing the size of the firm, Coase notes that "[o]ther things being equal, therefore, a firm will tend to be larger: . . . (*b*) the less likely the entrepreneur is to make mistakes and the smaller the increase in mistakes with an increase in the transactions organised." Coase NOF, *supra* note 230, at 396. However, empirical economics might suggest that, in fact, the larger the transaction, the bigger the mistakes.

[271] The recent award of the 2002 Nobel Prize to Daniel Kahneman and Vernon Smith for their work in behavioral and experimental economics should hopefully advance the debate. *See* Press Release, The Royal Swedish Academy of Sciences, The Bank of Sweden Prize in Economic Sciences in Memory of Alfred Nobel 2002 (Oct. 9, 2002), *at* http://www.nobel.se/economics/laureates/2002/press.html (last visited Oct. 11, 2003).

[272] *See, e.g.*, Arlen, *supra* note 256, at 1788 ("Behavioral economic analysis of law shows promise, but it cannot yet provide us with a rigorous analytical framework which is consistently superior to conventional law and economics.").

[273] *See, e.g.*, Gregory Mitchell, *Taking Behavioralism Too Seriously? The Unwarranted Pessimism of the New Behavioral Analysis of Law*, 43 WM. & MARY L. REV. 1907, 2021 (2002) ("Just as we should not base our legal rules and standards on faulty assumptions about the basic rationality of people, so should we not base reforms of our legal rules and standards on faulty claims about the basic irrationality of people.").

[274] Coase, *supra* note 196, at 3–4; *see also id.* at 5 ("None of the essays in this book deals with the character of human preferences, nor, as I have said, do I believe that economists will be able to make much headway until a great deal more work has been done by sociobiologists and other noneconomists.").

d. *Problematic Transitions: The Auction*

A final argument against privatization is the lack of an appropriate transition mechanism. After all, how will the entitlements be allocated? This issue has received the greatest attention in the context of spectrum allocation, where the current vogue espouses auctions.[275] Notwithstanding efforts to improve auction design,[276] the auction brings with it its own set of problems.

Auctions are clearly better than giving away spectrum to specific licensees for specific uses under a "command and control" model.[277] Another benefit is

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[275] This is based on Coase's zero-transaction abstraction. *See also* Coase, *supra* note 54, at 30 ("The simplest way of doing this would undoubtedly be to dispose of the use of a frequency to the highest bidder, thus leaving the subdivision of the use of the frequency to subsequent market transactions."). For more recent support of the auction idea, see, e.g., FEDERAL COMMUNICATIONS COMMISSION, FCC DOC. NO. 97-533, WT DOCKET NO. 97-150, THE FCC REPORT TO CONGRESS ON SPECTRUM AUCTIONS 39–41 (1997), *at* http://wireless.fcc.gov/auctions/data/papersAndStudies/fc970353.pdf (last visited Oct. 11, 2003); Gregory L. Rosston & Jeffrey S. Steinberg, *Using Market-Based Spectrum Policy to Promote the Public Interest*, 50 FED. COMM. L.J. 87 (1997); GREGORY L. ROSSTON, THE LONG AND WINDING ROAD: THE FCC PAVES THE PATH WITH GOOD INTENTIONS 17–20 (Stanford Institute for Economic Policy Research, Discussion Paper No. 01-08, 2001), *available at* http://siepr.stanford.edu/papers/pdf/01-08.pdf (last visited Oct. 11, 2003); John McMillan, *Selling Spectrum Rights*, 8 J. ECON. PERSP. 145, 160 (1994) ("The FCC's spectrum auction is unprecedented in its use of economic theory in the design of the auction."); Evan Kwerel & Walt Strack, Federal Communications Commission, Auctioning Spectrum Rights (Feb. 20, 2001) (unpublished manuscript), *at* http://wireless.fcc.gov/auctions/data/papersAndStudies/aucspec.pdf (last visited Oct. 11, 2003). For a more nuanced and balanced portrait of auctions versus comparative selection, see ORGANISATION FOR ECON. CO-OPERATION AND DEVEL. (OECD) DOC. NO. DSTI/ICCP/TISP(2000)12/FINAL, SPECTRUM ALLOCATION: AUCTIONS AND COMPARATIVE SELECTION PROCEDURES (2001) *at* http://www.olis.oecd.org/olis/2000.doc.nsf/LinkTo/dsti-iccp-tisp(2000)12-final (last visited Oct. 11, 2003) [hereinafter OECD Report]. For a survey of the rise of the auction phenomenon, see Krystilyn Corbett, Note, *The Rise of Private Property Rights in the Broadcast Spectrum*, 46 DUKE L.J. 611 (1996).

[276] *See, e.g.*, Jeffrey Banks et al., Theory, Experiment and the Federal Communications Commission Spectrum Auctions (2001) (unpublished manuscript) (using experimental economics to model how actual participants will behave), *at* http://www.ices-gmu.org/pdf/materials/376.pdf (last visited Oct. 11, 2003); Michael Abramowicz, *The Law-and-Markets Movement*, 49 AM. U. L. REV. 327, 335–73 (1999) (improving private exchanges via a combination of auction, exchange, and self-assessment rules); Patrick S. Moreton & Pablo T. Spiller, *What's in the Air: Interlicense Synergies in the Federal Communications Commission's Broadband Personal Communication Service Spectrum Auctions*, 41 J.L. & ECON. 677 (1998); Dean Lueck, *Auctions, Markets, and Spectrum Ownership: Comment on Moreton and Spiller*, 41 J.L. & ECON. 717 (1998).

[277] For a persuasive criticism of the "command and control" paradigm, see MARTIN NEIL BAILY, ET AL., WT DOCKET NO. 00-230, *IN RE* PROMOTING EFFICIENT USE OF SPECTRUM THROUGH ELIMINATION OF BARRIERS TO THE DEVELOPMENT OF SECONDARY MARKETS: COMMENTS OF 37 CONCERNED ECONOMISTS (Feb. 7, 2001), *at* http://www.aei.brookings.org/publications/related/fcc.pdf (last visited Oct. 11, 2003); *see also* Hazlett CDEMI, *supra* note 68

that they enrich the public fisc. As of autumn 2003, auctions for wireless spectrum have raised over $40 billion in revenues for the U.S. Treasury.[278] As Eli Noam has pointed out, however, this uses a one-time cash inflow to fund ongoing annual expenditures: governments clearly should not be going around selling public assets to ease budgetary pressures.[279] In addition, auction receipts are offset by reduced future tax receipts (since bidding costs are deducted from income).[280]

Another argument against auctions is that providers will pass on the cost of auctions in the form of higher prices to consumers. Many sophisticated commentators ignore this reality. For instance, Lawrence Zelenak exempts auctions from his general critique of revenue maximizing lotteries because the "price to the consumer of personal communications will be a function of the *producer's marginal cost curve*. Thus the cost to the consumer will be the same whether the producer received the license as a windfall or paid dearly for it."[281] Unfortunately, this wishfully assumes a perfectly competitive market. As Jerry Hausman has pointed out, "*the actual economics of telecommunications investment could not be further from a perfectly contestable market*. . . . Thus, the use of a perfectly contestable market standard fails to recognize the important

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(arguing that incumbent licensees "can file position papers, raise objections, question assertions of entrants, demand additional information, and present doomsday scenarios about the effect of additional competition. All the while, they win the game through mere delay").

[278] *See* FEDERAL COMMUNICATIONS COMMISSION, AUCTIONS SUMMARY, *at* http://wireless.fcc.gov/auctions/summary.html#completed (last visited Oct. 11, 2003); *see also* FEDERAL COMMUNICATIONS COMMISSION, FCC DOC. NO. 02-179, *IN RE* IMPLEMENTATION OF SECTION 6002(B) OF THE OMNIBUS BUDGET RECONCILIATION ACT OF 1993: ANNUAL REPORT AND ANALYSIS OF COMPETITIVE MARKET CONDITIONS WITH RESPECT TO COMMERCIAL MOBILE SERVICE, App. B (2002), http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-02-179A1.pdf (last visited Oct. 12, 2003); Woolley, *supra* note 57, at 150 ("In recent years companies—mostly cell phone carriers—have bid over $30 billion for access to a mere 5% of the prime spectrum."). Similarly, the auctioning of forests could bring revenue to the government (but would be ill-advised). *See* Stroup & Baden, *supra* note 89, at 309.

[279] *See* Eli M. Noam, *Before the U.S. Senate Committee on Commerce on Radio Spectrum Allocations and Valuation*, 104th Cong. (July 25, 1995) (prepared testimony of Eli M. Noam) ("[B]udget pressures are forever. . . . It's like New York City solving its budget problems by selling off Central Park to developers."), *at* http://www.citi.columbia.edu/elinoam/articles/spectrum_allocation_testimony.htm (last visited Oct. 12, 2003).

[280] Noam estimates that about twenty-five cents are lost in this manner for every dollar raised. *See id.*

[281] Lawrence Zelenak, *The Puzzling Case of the Revenue-Maximizing Lottery*, 79 N.C. L. REV. 1, 17–18 (2000) (emphasis added); *see also* Kwerel & Strack, *supra* note 275, at 3 ("Pricing depends on opportunity cost, not historical cost, and the opportunity cost of spectrum is independent of the assignment technique.").

feature of sunk and irreversible investments—they eliminate costless exit."[282] Eli Noam even suggests that winning companies could try to recover their high bids by organizing an oligopoly to keep end-user prices high.[283]

Further, even if we assume there are no frivolous, unqualified, or collusive bidders,[284] there is the risk that only large corporations will be able to participate in the auctions. What happens to smaller, technologically innovative firms? Thomas Hazlett, perhaps privatization's most eloquent defender, concedes the point that auctions may not allocate resources to innovative companies.[285] After all, an auction simply rewards the highest bidder, regardless of its contribution to society. More broadly, we have to ask whether spectrum management's goal should be to maximize government revenue or to protect consumers.[286]

One of the touted benefits of privatization is the lure of secondary markets; indeed, this is often what allows the resource to be put to its most efficient use. Evidence to date, however, suggests that these oft-touted markets are unlikely to

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[282] Jerry A. Hausman, The Effect of Sunk Costs in Telecommunications Regulation 3 (1999) (unpublished manuscript) (emphasis added), *at* http://econ-www.mit.edu/faculty/jhausman/files/Colum98_rev3.pdf (last visited Oct. 12, 2003); *see also* OECD Report, *supra* note 275, at 16. The Report notes:

> The assumption that licence fees are a sunk cost is, however, based on the argument that the market is sufficiently competitive, which is not always the case given that the number of licences issued is usually limited either by the government and/or by the availability of spectrum. In addition, since all firms with a licence face a similar level of licence fees the possibility exists that all firms shift the costs of the licence to users. . . . While the concept of sunk costs has traditionally held sway in economic theory it has recently been questioned, and there is not unanimous agreement that the prices paid in auctions do not play a role in firm strategies especially with respect to their level of end user prices.

Id. (footnote omitted).

[283] Noam, *supra* note 279. Analogous problems emerge whenever the costs of entry to an industry escalate. For example, Yochai Benkler has argued that intellectual property rights increase not only revenues but costs for producers—"forcing producers to recoup these high entry costs by selling to wide audiences. This results in a relatively small number of producers able to fund full-time authoring and pay licensing fees to use existing information, who attempt to recover their investments by capturing wide audiences." Benkler, *supra* note 65, at 570; *see also* BENKLER, *supra* note 82, at 14.

[284] Which some argue might be a heroic assumption. *See, e.g.*, Comment, Ruth W. Pritchard-Kelly, *A Comparison Between Spectrum Auctions in the United States and New Zealand*, 20 MD. J. INT'L L. & TRADE 155, 159 (1996).

[285] *See* Hazlett Allocation Article, *supra* note 61, at 13–14.

[286] *See* Robinson, *supra* note 190, at 621 (bemoaning the "current enthusiasm for auctions merely as a means of filling a depleted treasury, which has the effect of making communications policy a simple tool of fiscal policy, probably to the detriment of both."); Hazlett Allocation Article, *supra* note 61, at 15 ("[A] pre-occupation with government revenue extraction leads to anti-consumer policies.").

develop. In his study of New Zealand, which has gone furthest in privatizing its telecommunications markets,[287] Robert Crandall notes bluntly that "the winners of the New Zealand tenders for management rights have not begun to shift spectrum to potentially higher-valued uses."[288] This is something that ardent privatization advocates have difficulty grappling with.[289] There is also analogous evidence in the United States. Eli Noam has challenged "[a]dvocates of resale markets . . . to explain the empirical fact that there was never any meaningful resale of nonadvertising time slots for spectrum access by broadcasters, even in multistation markets . . . ."[290] Similarly, I have argued elsewhere that reselling capacity is anathema to incumbent telephone and cable companies.[291] Whatever the cause—and no doubt the "endowment effect" plays a central role[292]—a robust secondary market in rights does not necessarily follow from an auction.[293]

Finally, there is the argument that auctions which give away rights in fee simple, or even have a renewal expectancy, violate the Communications Act of 1934.[294] Some scholars go so far as to question their constitutionality based on First Amendment concerns.[295]

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[287] *See supra* notes 224–25.

[288] Robert W. Crandall, *New Zealand Spectrum Policy: A Model for the United States?*, 41 J.L. & ECON. 821, 838 (1998); *see also id.* at 827 ("The obvious rationale for replacing such a government-administered system is to allow migration of users so that each frequency is devoted to its most efficient use. But such migration may be difficult, if not impossible for a variety of practical and political reasons. As a result, a system of private spectrum management may be less effective than we would like.").

[289] *See, e.g.*, Spiller & Cardilli, *supra* note 136, at 74 (noting that "there have been substantial problems" with New Zealand's privatization of spectrum and "spectrum managers thus far have failed to do much management, with few resale or rent transactions taking place").

[290] Noam, *supra* note 250, at 786–87.

[291] *See* Dibadj, *supra* notes 51 and 170.

[292] *See supra* note 254.

[293] Perhaps the FCC has now recognized this problem. *See* Press Release, Federal Communications Commission, FCC Adopts Spectrum Leasing Rules and Streamlined Processing for License Transfer and Assignment Applications, and Proposes Further Steps to Increase Access to Spectrum Through Secondary Markets (May 15, 2003), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-234562A1.pdf (last visited Oct. 12, 2003).

[294] *See supra* note 203. Congress has permitted auctions for "use of the electromagnetic spectrum." 47 U.S.C. § 309(j)(3)(D) (2000). But it has also made clear that that this in no way confers ownership or a renewal expectancy. *See* 47 U.S.C. § 309(j)(6)(D) (2000). Eli Noam notes however, that, "this is a legal distinction without a real difference. The strong expectation is that the lease will be almost automatically renewed, just as it has been for TV broadcast licenses, where of more than 10,000 renewals between 1982 and 1989, less than 50 were challenged and fewer than a dozen were not renewed, usually because of some malfeasance. A postcard suffices to renew a license. In cable TV the nonrenewal of franchises is similarly rare." Noam, *supra* note 250, at 785. As FCC Commissioner Kathleen Abernathy observes,

The point here is not that auctions are inherently bad; indeed, I even recommend a carefully circumscribed form of auction, functioning as a lease with no renewal expectancy and mandatory resell requirements, as part of the solution.[296] However, broadly giving away estates in fee simple of public goods to the highest private bidder is, to say the least, problematic.

e. *Coda*

When examined critically, the arguments in favor of privatization rest on facile assumptions: that transaction costs are negligible, that equity is unimportant, that economic actors are rational. Unfortunately, these basic assumptions are rarely stated explicitly.[297] As Coase has observed, "[e]conomic theory has suffered in the past from a failure to state clearly its assumptions."[298]

Perhaps surprisingly, many seminal ideas were offered as hypotheses, not absolute truths.[299] Over time, drifting apart from their hypothetical roots, they

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"[u]nfortunately, there has been a tendency within the FCC to feel compelled to auction everything. Although that approach has an appealing symmetry, it is not what the statute requires, and it does not fit every factual circumstance." Abernathy, *supra* note 178.

[295] *See, e.g.*, Yochai Benkler & Lawrence Lessig, *Will Technology Make CBS Unconstitutional?*, NEW REPUBLIC, Dec. 14, 1998, at 12, 14; BENKLER, *supra* note 82, at 26–34; *see also supra* note 186.

[296] *See infra* Part VI.

[297] For example, in a recent pronouncement on spectrum allocation, the FCC states that for prime spectrum "the typical transaction costs associated with negotiation of access rights tend to be relatively low in relation to the value of the spectrum." FCC SPTF Report, *supra* note 205, at 38. But no explanation is offered as to why this is the case. Similarly, Thomas Hazlett critiques a non-property rights regime where "applicants must enter into detailed and lengthy negotiations with the representatives of existing spectrum users, reaching frequency-sharing agreements." Hazlett Allocation Article, *supra* note 61, at 11. But Hazlett does not explain why these "negotiations" would magically disappear under his property rights system. *See also* White, *supra* note 55, at 35–37 (transaction costs do not appear among objections to his "propertyzing" idea).

[298] Coase NOF, *supra* note 230, at 386. Similarly, William Fischel warns that "economists should be modest in the application of their trade. Using their tools of analysis to create a deterministic analysis of society seems dangerous and wrong-headed." FISCHEL, *supra* note 126, at 122. Ironically, Fischel supports privatization of zoning rights. *See* FISCHEL, *supra* note 126, at xiii; *see also id.* at 179–84.

[299] *See, e.g.*, De Vany et al., *supra* note 217, at 1501 ("The proposed system should provide the basis for field experiments in certain portions of the spectrum, thus making possible an empirical test of the benefits and costs of alternative spectrum-management systems."). *Cf. supra* note 209.

have become dogma.[300] Privatization of public assets, unfortunately, is one such idea. Far from being a panacea, it will actually exacerbate the anticommons.

B. *Public Commons*

The other solution proposed, the polar opposite of privatization, is to create a public commons. This is a relatively new theory that is beginning to form.

Conventional wisdom suggests that a commons is an unworkable way to allocate resources—be they intellectual property, forests, spectrum, or land.[301] Commons advocates fundamentally question this notion. At its core, their argument is that commons, if managed either by regulation or by social norms, are efficient.[302] Carol Rose has discussed how societies create customs to manage the commons.[303] Ellickson's influential book, *Order Without Law*—which studies the norms established by the cattle ranchers of Shasta County, California—can also be read in this light.[304] Other scholars have followed in arguing, for example, the efficiency of oyster harvesting during the nineteenth century when oyster beds were a commons.[305] Straightforward examples of a regulated commons, on the other hand, are public parks and streets.[306]

The argument has been applied to the examples discussed in Part III.B. Indeed, they serve as a vastly different approach to the privatization solutions depicted in Part V.A. In the copyright context, Stephen Breyer has questioned the

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[300] Brent Walton makes a similar argument in the context of Robert Ellickson's important work, ORDER WITHOUT LAW (1991). *See* Walton, *supra* note 89, at 163 ("Readers of Ellickson must be made aware that his hypothesis is still just that—a hypothesis that requires testing."). Of course, performing such an inquiry does not necessarily mean the underlying hypothesis is wrong. Frank Michelman, for instance, has performed an insightful analysis of the assumptions behind private property. *See* Michelman, *supra* note 34, at 32–34. This in no way contradicts the notion that private property has performed spectacularly well as an input into economic growth and development.

[301] *See supra* notes 21–26; *see also* Hardin, *supra* note 21, at 1244 ("Freedom in a commons brings ruin to all."); Abernathy, *supra* note 178 ("The commons is a precarious place.").

[302] *See, e.g.*, Benkler, *supra* note 229, at 437 ("The infamous 'tragedy of the commons' is best reserved to refer only to the case of unregulated access commons . . . . Regulated commons need not be tragic at all, and indeed have been sustained and shown to be efficient in many cases.").

[303] *See* Carol Rose, *The Comedy of the Commons: Custom, Commerce, and Inherently Public Property*, 53 U. CHI. L. REV. 711, 739–49 (1986).

[304] ROBERT C. ELLICKSON, ORDER WITHOUT LAW (1991).

[305] *See* BONNIE J. MCCAY, OYSTER WARS AND THE PUBLIC TRUST 182–83 (1998). *But see* Rasband, *supra* note 206 (critiquing McCay's thesis).

[306] *See, e.g.*, Lessig, *supra* note 218, at 406.

validity of copyright protection.[307] In the realm of spectrum allocation, a few commentators have argued that new technologies—that can seamlessly "hop" among frequencies to find open channels,[308] or even permit networks to scale with usage[309]—make a commons the best solution. There would be nothing to manage except interference.[310]

While theoretically engaging, commons advocates have perhaps not fully thought through the practical implications of their ideas. The most general problem is that of externality—as Harold Demsetz has identified, the central reason why we have private property.[311] Take for example, our national highway system which commons advocates trumpet as a successful example.[312] Since all taxpayers subsidize the highway system regardless of use, it allows certain groups, notably suburbanites and truckers, to externalize their costs on the rest of

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[307] *See* Stephen Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 HARV. L. REV. 281, 321 (1970). Justice Breyer argues:

> [T]he case for copyright in books considered as a whole is weak. It suggests that to abolish protection would not produce a very large or a very harmful decline in most kinds of book production. And abolition should benefit some readers by producing lower prices, eliminating the cost of securing permission to copy, and increasing the circulation of the vast majority of books that would continue to be produced.

Id. This position is consistent with Justice Breyer's dissent over thirty years later in Eldred v. Ashcroft, *supra* note 82. For a nuanced discussion of how the public domain, or commons, can rescue copyright law, see Jessica Litman, *The Public Domain*, 39 EMORY L.J. 965 (1990).

[308] These new technologies include ultra-wideband (UWB), software-defined radio (SDR) and mesh networks. *See, e.g., Technology Developers Urge FCC to Expand Unlicensed Spectrum*, MOBILE COMM. REP., July 22, 2002. A portion of the spectrum today effectively operates as a commons; namely, for low-powered applications such as wireless fidelity ("Wifi."). However, there are already significant interference problems. *See, e.g.*, Jesse Drucker & Julia Angwin, *New Way to Surf the Web is Giving Cell Carriers Static*, WALL ST. J., Nov. 29, 2002, at A3; Steven M. Cherry, *More Air for Wi-Fi?*, IEEE SPECTRUM, Feb. 2003, at 51.

[309] For instance, the Internet pioneer David Reed argues that a network can be designed such that capacity scales to usage; in other words, as the number of users N increases, network capacity grows as $\sqrt{N}$ or even N. *See* David P. Reed, *When Less is More*, FUTURE POSITIVE, May 21, 2002, *at* http://futurepositive.synearth.net/2002/05/21 (last visited Oct. 12, 2003).

[310] *See, e.g.*, Lessig, *supra* note 218, at 415 ("Broad swaths of the radio spectrum could be available for any to use, so long as they were using an approved broadcasting device. Spectrum could become a commons, and its use would be limited to those who had the proper, or licensed, equipment."); Stuart Buck, *Replacing Spectrum Auctions with a Spectrum Commons*, 2002 STAN. TECH. L. REV. 2 (2002) (supporting the commons approach for spectrum and offering examples of successful commons outside the telecommunications field), *available at* http://stlr.stanford.edu/STLR/Articles/02_STLR_2/article_pdf.pdf (last visited Oct. 12, 2003).

[311] *See supra* note 24.

[312] *See, e.g.*, Benkler, *supra* note 51, at 7.

society.[313] The analogy in spectrum would be interference among competing signals.[314]

Now, this could all be avoided if mainstream technology existed to track the specific highway usage of individual vehicles. But it does not yet. Similarly, advanced transmission technologies that can triage information[315]—critical to avoiding chaos in an unlicensed spectrum commons[316]—are still works in process.[317] Yochai Benkler, one of the most sophisticated scholars advocating a commons, for example, has heralded applications that in hindsight have been commercially unsuccessful.[318]

Perhaps the best example to illustrate this deficiency is Eli Noam's theoretically provocative proposal to have an "open-entry spectrum system" whereby individual communications packets purchase tokens which serve as "access codes."[319] The idea can be thought of as a "micro-license": instead of obtaining a license to transmit over a certain bandwidth, market actors would bid for licenses valid only for the duration of the transmission.[320] This all sounds glamorous except that, as Noam himself concedes, "[t]echnologically, the

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[313] Benkler tries to address this issue somewhat confusingly by differentiating between upfront and usage cost, and arguing that a subsidy to truckers simply increases the usage cost differential. *See* Benkler, *supra* note 217, at 356–57.

[314] *See, e.g.*, De Vany, *supra* note 141, at 637 ("Pervasive interference externalities destroy the ability of markets to work efficiently and may prevent them from working at all if the spectrum becomes a commons."); Hazlett Wireless Article, *supra* note 61, at 485 ("It is undisputed that a true commons would lead to over-exploitation and airwave chaos.").

[315] The technology to prioritize transmissions does not yet exist. Without this technology, an analogy may be drawn to the most pressing problem with the Internet where high value communications must compete for space with low value, or even destructive items such as junk e-mail. *See also* Hazlett Wireless Article, *supra* note 61, at 491.

[316] *See, e.g.*, Benkler, *supra* note 217, at 360 ("In an unlicensed environment, where no one controls transmission decisions, rules concerning power limits . . . in combination with transmission protocols . . . can operate to prevent interference and avoid congestion.").

[317] *See, e.g.*, Jon M. Peha, *Spectrum Management Policy Options*, 1 IEEE COMM. SURV. 2, 2-3 (1998) (noting that "rules of coexistence" such as access protocols would still need to be defined), *available at* http://www.comsoc.org/livepubs/surveys/public/4q98issue/pdf/Peha.pdf (last visited Oct. 12, 2003).

[318] For example, Benkler touts Metricom's Ricochet, a high-speed wireless network. *See* Benkler, *supra* note 217, at 325–26. However, Metricom ended up a business disaster. *See, e.g.*, Todd Wallack, *Wi-Fi Fans*, S.F. CHRON., Jun. 30, 2002, at G3 ("And San Jose's Metricom, which attracted a cultlike following for its Ricochet high-speed wireless service, went bankrupt last year after signing up just 51,000 users in 15 markets.").

[319] *See* Noam, *supra* note 250, at 777, 779.

[320] For an overall critique of Noam's idea, see Timothy J. Brennan, *The Spectrum as Commons: Tomorrow's Vision, Not Today's Prescription*, 41 J.L. & ECON. 791 (1998).

proposed system is not presently available . . . ."[321] Of course, the technology could develop and become commercialized at some point. The question is when and under what circumstances. As a consequence, any proposed regulatory framework must be both sensitive to existing technology and flexible enough to evolve.[322] In fact, to advocate a commons before the technology is ready may do more harm than good to the idea in the long run.

Even if we assume the technology exists, what happens to transaction costs—arguably higher than in any other regulatory regime given the sheer volume of transactions necessary to make the market function.[323] Further, having an exchange could restrict the content of messages; for instance, via membership requirements to participate in the spot market or by being able to filter the access codes.[324]

Another, more subtle problem with the commons, at least in areas where technology is involved, is that it shifts responsibility onto equipment manufacturers to make the commons function; for instance, by providing advanced equipment that averts interference. Yochai Benkler argues, for instance, that "the tragedy [of the commons] can be resolved within the framework of the equipment market, and does not require a shift to the spectrum market."[325] Yet what makes the motivations of equipment manufacturers more benign than anyone else's? In the commons regime, what is to prevent them from becoming

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[321] Noam, *supra* note 250, at 778; *see also* Hazlett, *supra* note 220, at 813 ("According to engineering specifications not entirely worked out, and employing machinery not yet available, the right to use the airwaves for specific instances will be assigned by competitive bidding."). This technological constraint is pervasive in the broader context of technologies permitting an information commons. *See* Lessig, *supra* note 218, at 415 ("The details of this technology are complicated. Fortunately, I do not have enough time to sketch them, because they are too complicated for me.").

[322] *See infra* Part VI.

[323] Noam appears to concede this point. *See* Noam, *supra* note 250, at 781 ("Transaction costs in an open-access system may be larger than in a traditional spectrum-assignment system . . . ."). *But see* Hazlett, *supra* note 220, at 814 ("Noam assumes that transaction costs in a digital spread spectrum world are trivial. This is a trick; alert policy analysts will not be fooled.").

[324] *See* Benkler, *supra* note 64, at 80–84.

[325] Benkler, *supra* note 217, at 362; *see also id.* at 351 ("[I]n an unlicensed environment, equipment manufacturers in general will fulfill the same role allotted to the spectrum owner in the property rights approach to spectrum management.").

the bottleneck?[326] If the solution is to regulate via standards,[327] how can we ensure the standard doesn't become the instrument of exclusion?

Perhaps the greatest problem with the commons argument, however, is that it underestimates the influence of economically powerful actors. Benkler argues that "[s]pectrum, like manna and unlike twisted copper pair, falls from the heavens to those who collect it. The monopolist, if one would emerge, would therefore not be a product of a 'natural' monopoly based on large initial investment in infrastructure."[328] Unfortunately, the economic reality is that airwaves, in and of themselves, are commercially useless unless an enterprise invests in transmission and reception equipment.[329] Without a regulatory framework that cabins the possibility of bottlenecks, large wireless carriers will have every opportunity to create a monopoly—in exactly the same way that local telephone companies have with twisted copper pair, or cable companies with coaxial cable.[330] Not to acknowledge and actively manage this reality is idealistic.

VI. WHAT TO DO?

A. *Reconceptualizing the Problem*

The traditional reaction to many difficult public policy questions has thus been bizarrely bifurcated: either privatize the problem, or create a public commons. The wide divergence between these putative solutions is likely why the debate is stalled despite voluminous writings on both sides. The first, and arguably most important, step out of the quagmire, is to identify the problem correctly. Why do we have exclusionary suburbs, or overly protective intellectual

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[326] Perhaps anticipating this point, Benkler argues that "[w]hat motivates equipment manufacturers is that they will sell more devices than their competitors if their devices can deliver more reliable, faster transmissions in an unlicensed environment where allocation is attained by queuing." *Id.* at 360. But this explanation seems unsatisfactory. After all, can not the same thing be said about any license holder in today's regime? Indeed, does not every for-profit corporation aspire to sell more of a better product?

[327] *See, e.g.*, Benkler, *supra* note 64, at 81 ("Regulation must focus on equipment certification rules designed to prevent the implementation of spectrum-hogging techniques in equipment designed for use of the spectrum commons.").

[328] Benkler, *supra* note 217, at 364; *see also id.* at 357 ("[T]he free usage of common [spectrum] infrastructure is not the result of subsidy, because no cost is involved in developing, maintaining, or recovering the infrastructure.").

[329] Interestingly, Benkler himself seems to acknowledge this when he proposes "that we stop talking about wireless communications regulation in terms of resource management. Using this terminology obscures the fact that the problem is one of coordinating the use of equipment that can cause and suffer collisions and congestion." *Id.* at 391; *see also id.* at 291 ("'[S]pectrum management' means regulating how these people use their equipment."); *supra* note 220.

[330] *See* Dibadj, *supra* notes 51, 170.

property law, or a spectrum morass, or public lands being destroyed? To try to explain this sad state of affairs with public choice theories or perversion of the public interest mandate is incomplete.

This Article has proposed that the mechanism allowing these travesties is subtle. Government bestows upon private economic actors rights short of property rights. In turn, these regulatory givings allow private parties to exclude others, holding up competition and diversity. Arguably the most critical step in crafting a solution is the first one: recognizing that anticommons exist and how they came about.

The second is not to lose hope that we can reform our public institutions. At its core, the reason why the privatization argument fails is that government is necessary to supplement and protect market actors from transaction costs, inequities and irrationality.[331] We must eschew what Lawrence Lessig has identified as our "self-indulgent 'anti-governmentalism.' "[332] Once we understand the complexity of the problem, the incompleteness of the raging dialogue, and the positive role government can be made to play, new possibilities emerge.

If dismantling and preventing the anticommons becomes a central objective of administrative law, then different tools can be brought to bear. In his classic article on administrative law reform, Richard Stewart suggests:

> Administrative agencies might be classified by their function, structure, powers, environment, and the nature and quantities of discretion exercised. . . .
>
> Such a classification of agency functions and institutional contexts might be paralleled by a similar classification of the various techniques for directing and controlling administrative power, including judicial review, procedural requirements, political controls, and partial abolition of agency functions.[333]

Substantively, are regulatory agencies getting appropriate authority under their enabling statutes or putting available resources to their best use? Procedurally, what checks are there on legislative and administrative power?

Reconceptualization can reveal stunning problems ignored in the current dialogue. For instance, the Administrative Procedure Act (APA)[334] excludes from the usual procedural requirements such as notice and comment rulemaking "a matter relating to agency management or personnel or to *public property, loans, grants, benefits, or contracts*."[335] In their study of why "to date, most government

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331 *See supra* Part V.A.2.

332 Lessig, *supra* note 218, at 418.

333 Stewart, *supra* note 165, at 1810 (footnote omitted).

334 Pub. L. No. 79-404, 60 Stat. 237 (1946) (codified at 5 U.S.C. §§ 552–706 (2000)).

335 5 U.S.C. § 553(a)(2) (2000) (emphasis added).

disposition schemes have failed on a grand scale,"[336] Harold Krent and Nicholas Zeppos demonstrate how this omission represents a "failure to conceptualize government property dispositions as regulatory policymaking . . . ."[337] Recasting these government givings as central to the regulatory function would necessarily invite more scrutiny. It would be more difficult to create an anticommons.

We must also shift attitudes away from regulation as omniscient and deterministic, and toward a model that is flexible to accommodate alternative viewpoints as well as societal and technological evolution.[338] While applied economics must usefully inform law, it should by the same token recognize its significant predictive limitations.[339] Experimental economics, which attempts to craft its policy prescriptions on empirical reality, is an important step in this direction.[340] A related notion is to move away from one-size-fits-all regulatory prescriptions. It is in this vain, for instance, that Jane Ginsburg has proposed a compulsory scheme for "low authorship"[341] works but not necessarily for other copyrighted works.[342] Government must understand the nuances of what it is planning to give away; after all, as Gerald Torres has proposed in his analysis of

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[336] Krent & Zeppos, *supra* note 89, at 1707.

[337] *Id.* at 1747.

[338] In fact, this is why command and control economics are destined to fail. Leo Herzel, who first suggested privatization of the airwaves, harnessed this point to argue against government prescription. *See* Herzel, *supra* note 131, at 808 ("The choice of a method of color television transmission by an administrative commission is an extremely formidable problem and involves predictions about the course of scientific development in the foreseeable future and about public behavior when confronted with new choices."); *see also supra* note 277.

[339] *See, e.g.*, Stewart, *supra* note 165, at 1703. Stewart explains:

> Because applied economics is an art that requires discretionary judgments to be made in selecting the proper universe for analysis, defining and measuring the relevant variables, and resolving complications of the second, third, and fourth order effects generated by possible policy choices, no single policy solution will generally be indicated to be clearly correct.

Id. (footnotes omitted). For a general critique of the current relationship between law and economics, see Reza Dibadj, *Beyond Facile Assumptions and Radical Assertions: A Case for "Critical Legal Economics"?*, 2003 UTAH L. REV. (forthcoming).

[340] *See supra*, Part V.A.2.c.

[341] Defined as "personality-deprived information compilations such as directories, indexes and databases." Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 COLUM. L. REV. 1865, 1866 (1990).

[342] The compulsory license would enable "competitors to access, copy, and reorganize data gathered by the first compiler, but [afford] the first compiler compensation for the appropriations." *See id.* at 1870–71. In a similar vein, Stephen Breyer has noted that copyright law has a different competitive effect on textbooks versus trade books. *See* Breyer, *supra* note 307, at 321.

environmental regulation, "[t]he state does not own a river or the sky like it owns the furniture in the state house."[343]

In filings before the FCC, I have argued that perhaps the only way out of the spectrum "privatization" vs. "commons" debate is for the FCC to hedge its bets and experiment with both a commons and licensed leases with mandatory resell requirements.[344] That way, the Commission will be ready no matter how technology evolves: if the predictions of commons advocates come to pass, more spectrum can be migrated as licenses expire; if, on the other hand, licensing remains the only commercially viable mechanism, a robust primary and secondary market is assured.[345]

Dissenting in *Lochner v. New York*,[346] Justice Holmes warned that "a constitution is not intended to embody a particular economic theory, whether of paternalism and the organic relation of the citizen to the State or of *laissez faire*."[347] The same admonition should apply in regulatory law: flexibility should be a touchstone.

B. *Revitalizing Doctrines*

1. *Consumer Welfare and Competition*

Beyond broadly reconceptualizing regulatory law, we should seek to reinvigorate specific substantive doctrines that can serve to forestall an anticommons. Foremost among these is to reshape the nebulous "public interest" standard into one of "consumer welfare."[348] Consumers typically get cheaper,

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[343] Gerald Torres, *Who Owns the Sky?*, 19 PACE ENVTL. L. REV. 515, 530 (2002).

[344] *See* Reza Dibadj, Public Comment on Federal Communications Commission Spectrum Policy Task Force Report ET Docket No. 02-135 (Dec. 12, 2002), *at* http://gullfoss2.fcc.gov/prod/ecfs/retrieve.cgi?native_or_pdf=pdf&id_document=6513397519.

[345] *See id.*

[346] 198 U.S. 45 (1905).

[347] *Id.* at 75 (Holmes, J., dissenting).

[348] Prominent economists, notably Jerry Hausman, have proposed this in the context of telecommunications reform. *See, e.g.*, Jerry A. Hausman & J. Gregory Sidak, *A Consumer-Welfare Approach to the Mandatory Unbundling of Telecommunications Networks*, 109 YALE L.J. 417, 450–51 (1999); Jerry Hausman & Howard Shelanski, *Economic Welfare and Telecommunications Regulation: The E-Rate Policy for Universal-Service Subsidies*, 16 YALE J. ON REG. 19, 28 (1999). *Cf.* Hazlett Wireless Article, *supra* note 61, at 452 ("The public interest standard relegates consumer welfare to one interest competing among many."). One must be very careful, however, to ensure that the term "consumer welfare" actually means what it says. In particular, well-known commentators have cleverly managed to equate "consumer welfare" with efficiency. This is most notable in antitrust law, where the term is prevalent. *See, e.g.*, ROBERT M. BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF 91 (1978) (The "whole task of antitrust can be summed up as the effort to improve allocative efficiency

more innovative products and services in a competitive and diverse environment; after all, as the Department of Justice has pointed out, "competition tends to drive markets to a more efficient use of scarce resources."[349]

As a consequence, a "consumer welfare" standard can be used to protect new entrants against established interests who currently use givings to squelch competition under the "public interest" banner.[350] As FCC Chairman Powell reminds us, "[c]ompanies don't like competition. It's the biggest red herring and garbage I've ever heard in my life."[351] A consumer welfare standard will force incumbents to confront what they hate. It pushes regulation to combat bottleneck control.

Such an approach would quickly debunk arguments supporting regulations that perpetuate an anticommons. Take, for instance, the recent abandonment of spectrum caps: there are no longer any regulatory limits as to how much spectrum a cellular provider can aggregate.[352] Under the public interest standard, critics of spectrum caps triumphed using slippery generalities[353] and subtle inconsistencies.[354] The focus on consumers was lost in the noise. Under a consumer welfare standard, these regulations would have remained in place, and

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without impairing productive efficiency so greatly as to produce either no gain or a net loss in consumer welfare."). For the argument that this misleading definition of consumer welfare infects all of antitrust law, see Reza Dibadj, *Saving Antitrust*, 75 U. COLO. L. REV. (forthcoming 2004).

[349] William J. Kolasky & Andrew R. Dick, The Merger Guidelines and the Integration of Efficiencies into Antitrust Review of Horizontal Mergers 2 (2002) (unpublished manuscript), *at* http://www.usdoj.gov/atr/hmerger/11254.pdf (last visited Oct. 12, 2003). For a more detailed look at the benefits of competition *see* Dibadj, *supra* note 51, at 263–65.

[350] *See supra* Part IV.B; *see also* Reich, *supra* note 9, at 766 ("Just as frequently, government largess offers protection against the disadvantages of competition. . . . Sometimes licensing is a particularly obvious cover for monopoly. . . . The partnership of government and private may give further protection—not merely from the consequences of competition, but also from the legal consequences of eliminating competition.").

[351] FCC Spectrum Workshop, *supra* note 73, at 10 (statement of Michael Powell, FCC Chairman).

[352] *See supra* note 146.

[353] For example, Gregory Sidak et al. have argued that lifting spectrum caps would "[maximize] potential synergies" without explaining what these are. *See* J. Gregory Sidak et al., *A General Framework for Competitive Analysis in Wireless Telecommunications*, 50 HASTINGS L.J. 1639, 1664–65 (1999).

[354] Sidak et al. also claimed that spectrum caps "are no longer necessary, as competition in the wireless industry is robust." *See id.* at 1646–47. This argument however is circular, since competition is robust precisely because of the existence of caps. They also opine that "monopolization of the wireless equipment industry by wireless service firms would be next to impossible." *Id.* at 1650. It is unclear, however, why monopolization of the equipment industry is a necessary prerequisite to monopolization of the airwaves.

consumers would continue to benefit from the robust competition among wireless providers.[355]

2. *Public Trust*

a. *Modernizing an Ancient Doctrine*

The public trust doctrine traces its roots to the Justinian notion that certain resources—such as fish, wild animals, and rivers—should not be owned privately.[356] Its earliest American manifestation is the New Jersey Supreme Court case of *Arnold v. Mundy*,[357] where the defendant took oysters from an oyster bed which the plaintiff claimed belong to him under a land grant tracing back to the King of England. Finding for the defendant, Chief Justice Kirkpatrick observed:

> [T]his power, which may be thus exercised by the sovereignty of the state, is nothing more than what is called the *jus regium*, the right of regulating, improving, and securing for the common benefit of every individual citizen. The sovereign power itself, therefore, cannot, consistently with the principles of the law of nature and the constitution of a well ordered society, make a direct and absolute grant of the waters of the state, divesting all the citizens of their common right. It would be a grievance which never could be long borne by a free people.[358]

In a similar vein, where a plaintiff claimed he had rights to land under the Raritan River in New Jersey that was used as an oyster bed under a grant from King Charles II to the Duke of York, the United States Supreme Court noted:

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[355] As FCC Commissioner Copps argued in an impassioned dissent, lifting spectrum caps would be "stifling competition, encouraging industry consolidation and short-changing hard-pressed American consumers. Let's not kid ourselves—this is, for some, more about corporate mergers than it is about anything else. . . . We have not adequately evaluated the prospects for economic concentration and the potential for wireless monopolies." Michael J. Copps, Statement of Commissioner Michael J. Copps, Dissenting, *In Re* 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services (WT Docket No. 01-14) 1 (Nov. 7, 2001), *at* http://www.fcc.gov/Speeches/Copps/Statements/2001/stmjc123.pdf (last visited Oct. 12, 2003).

[356] These resources were labeled "*res extra commercium*" or "*res communes*." *See, e.g.*, Torres, *supra* note 343, at 529.

[357] 6 N.J.L. 1 (1821).

[358] *Id.* at 78. In his opinion, Justice Rossell noted that it would be insulting to think "that our legislatures, from time to time taking upon them to regulate fisheries of oysters as well as of floating fish for the public benefit, were totally ignorant of their powers, overstepped the bounds prescribed by the constitution, to the destruction of the rights and interests of individuals? I think not." *Id.* at 92–93.

> If the shores, and rivers, and bays, and arms of the sea, and the land under them, instead of being held as a public trust for the benefit of the whole community, to be freely used by all for navigation and fishery, as well for shell-fish as floating fish, had been converted by the charter itself into private property, to be parceled out and sold by the duke [of York] for his own individual emolument? There is nothing we think in the terms of the letters patent, or in the purposes for which it was granted, that would justify this construction.[359]

Fifty years later, in *Illinois Central Railroad Co. v. Illinois*,[360] the United States Supreme Court again used the public trust doctrine to uphold the Illinois legislature's revocation of a grant of a large portion of submerged lands at Chicago's waterfront to the railroad.[361] The best known modern application of the public trust doctrine is the *Lake Mono* case,[362] where the Supreme Court of California allowed the California Water Resources Board to revoke a 1940 permit allowing the Los Angeles Department of Water and Power to appropriate the flow from several streams into Lake Mono.[363]

Consistent in every opinion is the desire to entrust the management of scarce resources to the state. As society has evolved, however, more resources have become scarce: we need to worry not only about our waters and fish, but also about things like spectrum and forests. As Joseph Sax has persuasively argued:

> The central idea of the public trust is preventing the destabilizing disappointment of expectations held in common but without formal recognition such as title. The function of the public trust as legal doctrine is to protect such public expectations against destabilizing changes, just as we protect conventional private property from such changes.[364]

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[359] Martin v. Waddell's Lessee, 41 U.S. (16 Pet.) 367, 413 (1842).

[360] 146 U.S. 387 (1892).

[361] *See id.* at 456 ("This follows necessarily from the public character of the property, being held by the whole people for the purposes in which the whole people are interested.").

[362] Nat'l Audubon Soc'y v. Superior Court of Alpine County, 658 P.2d 709 (Cal. 1983).

[363] *See id.* at 712 ("In our opinion, the core of the public trust doctrine is the state's authority as sovereign to exercise a continuous supervision and control over the navigable waters of the state and the lands underlying those waters.").

[364] Joseph L. Sax, *Liberating the Public Trust Doctrine from Its Historical Shackles*, 14 U.C. DAVIS L. REV. 185, 188 (1980) (footnote omitted). Note the remarkable consistency with the Supreme Court's motivations in *Martin v. Waddell's Lessee*:

> [F]or the men who first formed the English settlements, could not have been expected to encounter the many hardships that unavoidably attended their emigration to the new world, and to people the banks of its bays and rivers if the land under the water at their very doors was liable to immediate appropriation by another as private property; and the settler upon the fast land thereby excluded from its enjoyment, and unable to

If the regulatory state is viewed as the custodian of the public assets—rather than merely as protecting some ill-defined "public interest"—then its ability to perpetuate givings is sharply curtailed.[365] The true power of public trust would be to "integrate legal doctrine and fundamental principles of intelligent resource management, instead of treating basic social decisions as if they were merely the province of a title examiner."[366]

Modern commentators have already begun applying the doctrine in fields adjacent to water management, such as managing land,[367] and saving the air from pollution.[368] One distinguished scientist urging the preservation of biodiversity has forcefully argued that forests are "a public trust of incalculable value."[369] But the idea has even broader applicability. Take intellectual property law, where scholars insightfully advocate an expansion, not retraction,[370] of fair use as an "instrument of inclusion."[371] The public trust lens would buttress their position:

> take a shell-fish from its bottom, or fasten there a stake, or even bathe in its waters without becoming a trespasser in the rights of another.

See 41 U.S. (16 Pet.) at 414.

[365] *Cf.* Wilkinson, *supra* note 243, at 312 (arguing that the public trust doctrine is not merely a limitation on agency power, but a mechanism to force agencies to act proactively).

[366] Sax, *supra* note 364, at 194; *see also* Reich, *supra* note 9, at 779. Reich states:

> Once property is seen not as a natural right but as a construction designed to serve certain functions, then its origin ceases to be decisive in determining how much regulation should be imposed. The conditions that can be attached to receipt, ownership, and use depend not on where property came from, but on what job it should be expected to perform. Thus in the case of government largess, nothing turns on the fact that it originated in government. The real issue is how it functions and how it should function.

Id. at 779.

[367] *See, e.g.*, Wilkinson, *supra* note 243.

[368] Gerald Torres argues that "all regulation or allocation of the assets make up the sky are invested with a public interest that defines the limits to actions that the government may take in relation to this resource. The federal government may no more trade away the public's interest in the sky than the State of Illinois could sell the shore of Lake Michigan." Torres, *supra* note 343, at 524. Torres labels his proposal a "skytrust." *Id.* at 533.

[369] Edward O. Wilson, *Selling Out Our Forests*, WASH. POST, Aug. 28, 2003, at A27.

[370] *See supra* notes 85–86.

[371] Okediji, *supra* note 87, at 154; *see also* O'Rourke, *supra* note 45, at 1249 (arguing that "patent law should adopt a fair use doctrine to . . . prevent rights from becoming overbroad in the new circumstances of today's high-tech world"). *But see* Rubenfeld, *supra* note 76, at 16–21 (arguing that the fair use doctrine is not sufficient to make current copyright law constitutional).

the sovereign could grant rights when they promote a public purpose, while not granting them or even rescinding them in other circumstances.[372]

Another accomplishment of the public trust doctrine would be to make the entire concept of givings problematic: after all, how can the sovereign give something away when such an action would transgress its authority? This makes both blatant giveaways and auctions problematic, and refocuses the debate around fees. Simply put, if an economic actor wants to use public resources, it must pay a rental or usage fee that is unsubsidized.[373] A number of commentators have moved in this direction in a variety of contexts.[374] The state could use the money to fund programs in a field related to the asset held in trust.[375] Unlike auctions or the current broadcasting license giveaway, the state maintains the option to cancel the lease at any time.[376] Also in contrast to auctions, the government receipts are spread out across time.[377]

b. *Managing Transitions*

The public trust doctrine can also simplify transitions to remedy givings that have already occurred. In particular, cases such as *Illinois Central* and *Lake Mono* stand for the proposition that the sovereign has the right to revoke a grant conferred under the public trust.[378]

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[372] Keith Aoki argues that such an interpretation would respect the language of the Copyright Clause, which instructs Congress to "promote the Progress of Science and useful Arts." *See* Aoki, *supra* note 40, at 41–46; *see also supra* note 82.

[373] As Richard Stroup and John Baden have argued, "there is a measure of equity in having those people who *use* a resource, or wish to reserve it for use, pay for it by sacrificing some of their wealth." *See* Stroup & Baden, *supra* note 89, at 307.

[374] In the forest management area, see *id.* ("Those using the forests would be required to pay, whether it be for recreation, timber harvest, or even research in a unique area."); Knize, *supra* note 1, at 112. Lawrence Lessig suggests fees in the context of copyright, at least as a mechanism to separate active copyrights from those that should fall into the public domain. *See* Lawrence Lessig, *Protecting Mickey Mouse at Art's Expense*, N.Y. TIMES, Jan. 18, 2003, at A17 ("Patent holders have to pay a fee every few years to maintain their patents. The same principle could be applied to copyright."). Interestingly, Leo Herzel's initial proposal to privatize the airwaves suggested the "FCC could *lease* channels for a stated period to the highest bidder." Herzel, *supra* note 131, at 811 (emphasis added).

[375] For instance, spectrum rental fees could be used to improve digital content, software and tools for education. *See* CALABRESE, *supra* note 56, at 12.

[376] This would be consistent with Congress' statutory direction. *See supra* note 203.

[377] *See supra* note 279; *see also* Peha, *supra* note 317, at 7 ("That way [via fees] governments could not use one-time payments to pay for annual expenditures.").

[378] *See supra* notes 360–63.

Take, for instance, the case of incumbents, such as UHF licensees, who currently control broad swathes of spectrum without having paid a dime.[379] One of the key holdups to license reform is how to move these bandwidth hogs and replace them with more productive users. In its latest pronouncement on spectrum reform, the FCC contemplates leaving incumbents where they are, or providing incentives for them to move.[380] The underlying assumption, however, is that the licensees have a pre-determined right to use those frequencies. Even sophisticated commentators such as Arthur De Vany simply assume that "[a]bandonment of frequencies by an incumbent . . . is *rational* only if the licensee receives compensation."[381] But why is this rational? In fact, why isn't the dialog around the irrationality of perpetuating an incumbent's free ride?[382] Under the public trust doctrine, of course, there would be no need to compensate the incumbents. This alone could help refocus the spectrum reform debate.[383]

Another example is that of government tax concessions. In his study of government franchising and the development of railroads in nineteenth century New Jersey, Christopher Grandy criticizes the state for reneging on tax concessions, accusing government of an "opportunistic breach."[384] If, however, this analysis is refocused using the tools presented in this Article, the tax concession can be viewed ab initio as a giving.[385] Further, under a broad

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[379] *See supra* notes 58–60 and accompanying text.

[380] *See* FCC Spectrum Rights Report, *supra* note 205, at 49–51; *see also* EVAN KWEREL & JOHN WILLIAMS, A PROPOSAL FOR A RAPID TRANSITION TO MARKET ALLOCATION OF SPECTRUM 6 (Fed. Communications Comm'n, OPP Working Paper No. 38, 2002), http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-228552A1.pdf (last visited Oct. 12, 2003).

[381] De Vany, *supra* note 141, at 639 (emphasis added). Curiously, supporters of spectrum privatization suddenly point to transaction costs and equity as reasons to prevent incumbent relocation. *See, e.g.*, Peter Cramton, et al., *Efficient Relocation of Spectrum Incumbents*, 41 J.L. & ECON. 647, 648 (1998). *Cf.* IKEDA NOBUO, THE SPECTRUM AS COMMONS (RIETI, Discussion Paper No. 02-E-002, 2003) (arguing that government authorities could pay incumbents to free spectrum via reverse auctions), http://www.rieti.go.jp/jp/publications/dp/02e002.pdf (last visited Oct. 12, 2003).

[382] The New America Foundation does suggest that "[o]ne option is to simply set a date when incumbent licenses will be auctioned rather than automatically renewed." *See* CALABRESE *supra* note 56, at 14. But then it dismisses this idea as "politically impractical." *Id.*

[383] Let alone the fact that not giving incumbents the right to stay on public property would be consistent with § 301 and § 304 of the Communications Act. *See supra* note 203.

[384] Christopher Grandy, *Can Government Be Trusted to Keep Its Part of a Social Contract?: New Jersey and the Railroads, 1825–1888*, 5 J.L. ECON. & ORG. 249, 249 (1989).

[385] Grandy argues that governments should not be parties to relational contracts since the state has enforcement power. *See id.* at 266–67. But curiously, Grandy becomes concerned only once the "giving" is taken away, not with the initial contract. More broadly, he ducks the question of how a state can participate in commerce without being a party to contracts.

conception of the public trust doctrine, the sovereign had every right to revoke its concessions, much like the State of Illinois did in *Illinois Central*.[386]

The public trust doctrine also accords with economic reality. Louis Kaplow suggests that efficiency dictates economic actors find ways to manage risk without relying on government largesse, since "[t]ransitional relief constitutes an externality that disrupts the market's response to the risk imposed by uncertainty concerning future government action."[387] Daryl Levinson even argues that "making government pay money is not an especially promising approach to constitutional remedies .... [G]overnment behavior responds to political, not market, incentives."[388]

At the broadest level, the public trust doctrine could help remedy two flagrant inconsistencies that exist between current takings and givings jurisprudence. First, compensation is due a private party if the government "takes" something, but we do not require the private party to pay a portion of the proceeds when the government "gives" something.[389] Second, not only does the private party not have to pay, but we expect the government to compensate the private party if the government revokes what its largesse originally bestowed. A weak form of the public trust doctrine would address the second problem; for example, moving incumbent broadcast licensees. A stronger form—one that renders givings themselves problematic—would also deal with the first.

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[386] *See supra* notes 360–61.

[387] Kaplow, *supra* note 249, at 551. Kaplow argues:

> The example of firms making potentially dangerous products, or making large investments on land that is likely to be taken in the near future for a highway project, illustrates the intuition behind the subtle and frequently overlooked point that it is desirable for investors to be influenced by the prospects of future government action, however uncertain, in making current decisions.

Id. at 615; *see also supra* notes 249–50.

[388] Daryl J. Levinson, *Making Government Pay: Markets, Politics, and the Allocation of Constitutional Costs*, 67 U. CHI. L. REV. 345, 416–17 (2000); *see also id.* at 414–15 ("In short, whereas well functioning markets require relatively stable entitlements and relatively high levels of individual autonomy over the disposition of these entitlements, democratic politics often demands coerced redistribution. Using market criteria to evaluate the fairness or efficacy of democratic processes simply will not do.").

[389] *See, e.g.*, Kaplow, *supra* note 249, at 554 ("[T]hose advocating mitigation of windfall losses virtually never recommend taxation of similar windfall gains."); Adam Diamant, *Government Takings? What About Givings?*, CHRISTIAN SCI. MONITOR, Feb. 24, 1995, at 18 (suggesting, somewhat tongue in cheek, that if government should compensate people under takings if the value of their land decreases more than 10%, then they should have to return 90% of any givings back to the government).

3. *"Property" vs. "Liability" Rules*

Another idea to forestall the anticommons is greater use of "liability" rules over "property" rules. In their classic article to unite concepts in tort and property law,[390] Guido Calabresi and Douglas Melamed distinguish two types of legal entitlements. An entitlement "is protected by a *property rule* to the extent that someone who wishes to remove the entitlement from its holder must buy it from him in a voluntary transaction in which the value of the entitlement is agreed upon by the seller."[391] On the other hand, "[w]henever someone may destroy the initial entitlement if he is willing to pay an objectively determined value for it, an entitlement is protected by a *liability rule*."[392] Property rules, like the privatization approach in Part V.A, thus give an absolute right to exclude; with a liability rule, another party is allowed to encroach on the entitlement provided she is willing to pay.

The conventional wisdom is that property rules encourage contracting. Building on Calabresi and Melamed's work, however, Ian Ayres and Eric Talley have challenged this concept:

> The ability of Solomonic entitlements such as untailored liability rules to facilitate Coasean trade is starkly at odds with the accepted wisdom that property rules are "market-encouraging" when transaction costs are low. Property rules and liability rules may thus run neck and neck in a Coasean horse race, even when transaction costs are low; and when private information is the major source of inefficiency, liability rules and other divided entitlement forms may hold the lead.
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> . . . .
>
> Our conclusion that uncertain and weakly protected entitlements might produce more efficient trade than undivided property rights runs counter to deeply held but possibly unexamined beliefs.[393]

A central reason for this reality is that with a liability rule, the entitlement owner is forced to reveal what the entitlement is worth to her, thereby sharply curtailing

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[390] Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089 (1972).

[391] *Id.* at 1092 (emphasis added).

[392] *Id.* (emphasis added).

[393] Ian Ayres & Eric Talley, *Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade*, 104 YALE L.J. 1027, 1101–02 (1995) (footnotes omitted). Calabresi and Melamed themselves observe that liability rules are created to avoid the hold-up problem. *See* Calabresi & Melamed, *supra* note 390, at 1106–07.

strategic bargaining and holdouts.[394] A hold-up, of course, is the telltale sign of an anticommons.[395]

Calabresi and Melamed observe that with liability rules, the state has to set the amount that needs to get paid.[396] Some commentators have seized on this additional step to question the superiority of liability rules.[397] Louis Kaplow and Steven Shavell have noted, however, that "if a court sets damages equal to its best estimate of harm—the average harm for cases characterized by the facts the court observes—the outcome under the liability rule will be superior, on average, to the outcome under property rules."[398]

In fact, liability rules are particularly good where there are collective action problems. Conceptualize, for example, a number of rights vested collectively in citizens: the right to enjoy clean air or vibrant forests, for example. Under a property rule regime, corporations who want to infringe on those rights would need to bargain with the polity at large. Of course, this is virtually impossible. The corporation could bargain directly with the state to cede those rights (which is happening today), but the state is not in a position to give the rights away, because they belong to the people. Liability rules, on the other hand, would force the corporation to pay for infringement. This conception dovetails nicely with the public trust doctrine: the state is acting as custodian for the public's rights, and anyone who wishes to infringe on those rights must pay for use.[399] No one claiming to be acting on society's behalf should be allowed to bargain away the entitlement for good.

Though not couching their arguments in this framework, a few innovative commentators are already heading in this direction. In the environmental arena, Kaplow and Shavell advocate pollution taxes, a variation on liability rules, realizing the futility of having pollution victims bargain under a property

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394 *See* Ayres & Talley, *supra* note 393, at 1082 ("[D]ivided entitlements can enhance welfare by promoting greater revelation of information during bargaining.").

395 *See supra* notes 41–42.

396 *See* Calabresi & Melamed, *supra* note 390, at 1092 ("Obviously, liability rules involve an additional stage of state intervention: not only are entitlements protected, but their transfer or destruction is allowed on the basis of a value determined by some organ of the state rather than by the parties themselves.").

397 *See, e.g.*, James E. Krier & Stewart J. Schwab, *Property Rules and Liability Rules: The Cathedral in Another Light*, 70 N.Y.U. L. REV. 440, 453 (1995) ("Just as obstacles to bargaining (transaction costs) might impede efficient exchanges by the parties in property rule cases, so problems in obtaining and processing information (assessment costs) might impede efficient damage calculations by the judge in liability rule cases.").

398 Louis Kaplow & Steven Shavell, *Property Rules Versus Liability Rules: An Economic Analysis*, 109 HARV. L. REV. 713, 719 (1996); *see also id.* at 728–32. In addition, creative ways of determining damages are possible, such as having to divide the profits from infringement. *See infra* note 402.

399 *See supra* Part VI.B.2.

regime.[400] In the context of our current, property-rule based, copyright regime which hinders social and scientific progress, Jed Rubenfeld argues that copyright should focus on "the prohibition of piracy, meaning an unauthorized duplication (and sale) or another's work."[401] Thus, a form of "liability" regime attains as long as the work is not a simple duplication:

> If the later work merely pirates the older work, it can be enjoined, and damages can be awarded. If it is not a reproduction but a derivative work, neither an injunction nor damages should be available. In such cases, however, the copyright holder would not be left wholly without remedy. *Instead, he would have an action for profit allocation.*[402]

Other scholars have similarly advocated a "compulsory licensing" mechanism where patents could be infringed upon. Some couch this as an expansion of fair use;[403] others would like to see infringers pay a fee.[404]

One can easily extend the liability rule argument to other anticommons. Imagine how different our urban landscape would be if those who wanted to deploy exclusionary zoning could do so only at a steep price. Or how much new technological innovation we would enjoy if we refused to give incumbent broadcasters or wireless providers an absolute right to exclude new competitors.

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[400] *See* Kaplow & Shavell, *supra* note 398, at 749 ("Bargaining appears to have relatively little importance in the context of industrial pollution because, as is often stated, victims of pollution are unlikely to bargain with those responsible for it.").

[401] Rubenfeld, *supra* note 76, at 48. Rubenfeld bases his ideas on the notion that copyright must not squelch the "freedom of imagination" which can be expressed via derivative works. *See id.*

[402] *Id.* at 55 (emphasis added; "profit allocation" emphasized in original). As Rubenfeld notes, this framework does not track the Calabresi-Melamed definitions since derivative works are immune from both injunctions and damages. *See id.* at 56. However, one can conceptualize the profit allocation as a proxy for the damages that the state must determine under the liability regime.

[403] *See* O'Rourke, *supra* note 45, at 1249–50 ("The [fair use] defense would authorize courts to weigh defined factors in deciding whether or not to excuse an infringement as fair."); Okediji, *supra* note 87, at 182 ("A fair use doctrine that considers the nature of the technological medium and that accounts for the value of the alleged infringer's use of the work offers the prospect of successful, if difficult, mediation of these interests in cyberspace."). *Cf.* Zaret, *supra* note 86, at 26–27 (suggesting that there needs to be less restrictive enforcement by copyright owners, and that part of the success to uphold greater copyright restrictions in the courts has been by carefully selecting defendants who are clearly hackers or pirates rather than more traditional users who legitimately benefit from fair use allowances).

[404] *See, e.g.*, Ayres & Talley, *supra* note 393, at 1093 ("Such a system would . . . take the form of a 'compulsory licensing' scheme, giving the improver an option to infringe the pioneer's patent in exchange for a fee determined by a licensing tribunal.").

C. *Process Checks*

1. *Judicial Review*

One of course hopes that legislators and regulators, held to a standard that finds the anticommons unacceptable, would deploy these reconceptualized substantive doctrines to curb givings. But courts have an important role to play if the elected branches do not. As Charles Haar points out in his study of the impact of suburbanization on the American landscape:

> The proposition I advance here is that courts are obliged to intervene—to undertake the coercive reordering of major social institutions—when a wrongful social practice either impairs a group's ability to participate in the political process or when another branch of government is systematically delinquent in carrying out the mandates of the constitution.[405]

Two well-known cases from environmental and local government law serve to illustrate the point. In *Seattle Audubon Society v. Evans*,[406] when Federal District Court Judge William Dwyer issued an injunction against timber sales from old growth forests,[407] he was careful to note that the "problem here has not been any shortcoming in the laws, but simply a refusal of administrative agencies to comply with them.... This invokes a public interest of the highest order: the interest in having government officials act in accordance with law."[408]

In *Mt. Laurel I*, when invalidating a zoning allowing only single family detached dwellings,[409] Justice Hall observed that land use regulations "cannot foreclose the opportunity of the classes of people mentioned for low and moderate income housing and in its regulations must affirmatively afford that opportunity, at least to the extent of the municipality's fair share of the present and prospective regional need therefor."[410]

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[405] HAAR, *supra* note 97, at 184; *see also id.* at xiv ("[A]t the present juncture of class and race relations in the United States, an aggressive posture on the part of the third branch of government is indispensable to the achievement of economic and social equality.").

[406] 771 F. Supp. 1081 (W.D. Wash. 1991).

[407] *See id.* at 1093 ("The logging of 66,000 acres of owl habitat, in the absence of a conservation plan, would itself constitute a form of irreparable harm. Old growth forests are lost for generations. No amount of money can replace the environmental loss.").

[408] *Id.* at 1096.

[409] *See supra* note 99.

[410] S. Burlington County NAACP v. Township of Mount Laurel, 336 A.2d 713, 724 (N.J. 1975). For a discussion of the successes of the *Mt. Laurel* doctrine, see HAAR, *supra* note 97, at 190. Haar even suggests that the *Mount Laurel* doctrine could:

> [E]xtend to other issues of metropoliswide concern, such as air pollution, the location of waste treatment plants, or the building of hospitals, sewer systems, or other major facilities.

Courts thus can "operate as a safety valve when the rest of the governmental system is clogged."[411] In particular, heightened judicial scrutiny of legislative delegation to private interests[412] would focus the debate on uncovering the existence of a giving.

To be sure, judicial review is not a panacea. There will still be collective action problems:

> [W]here the impact of a decision is widely diffused so that no single individual is harmed sufficiently to have an incentive to undertake litigation, and where high transaction costs and the collective nature of the benefit sought preclude a joint litigating effort, even though the aggregate stake of the affected individuals would justify it.[413]

Perhaps expanding, rather than limiting, citizen-suit provisions such as those in the Clean Air Act[414] could begin to address this issue.

Another criticism is that judicial remedies are often messy,[415] and courts should not pretend they are legislatures. Procedurally, greater use of special

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> Taking their cue from the courts, public interest groups and developers could now react less deferentially to the historically presumptive authority of localities to formulate policies with an eye only to local welfare.

Id. at 194.

411 HAAR, *supra* note 97, at 179.

412 *See, e.g.*, FARBER & FRICKEY, *supra* note 112, at 133–36.

413 Stewart, *supra* note 165, at 1763.

414 *See, e.g.*, Torres, *supra* note 343, at 559. Torres notes:

> The effects of trading schemes compound the injury that results from a limitation of the citizen suit provisions. Under the emissions trading program a utility can legally emit as much pollution as it wants (consistent with other requirements of the Act) as long as it buys enough allowances to guarantee its pollution entitlements. This effectively deprives citizens of their ability to enjoin such excessive pollution via the enforcement action, and fails to compensate them for this divestiture of their property right in the nuisance action that was functionally replaced by the citizen's suit provision. Thus, the current emissions trading program effectively transfers the citizen's entitlement to the utility owners, who in turn trade these entitlements for cash and realize significant financial benefits.

Id.

415 S. Burlington County NAACP v. Township of Mount Laurel, 456 A.2d 390 (N.J. 1983) (Mt. Laurel II) is an example. During the course of a 216-page opinion, the court appointed a panel of three judges to manage housing cases. *See id.* at 490–91. But again, what other option was there to defend housing diversity? For a cynical view on the Mt. Laurel litigation, see FISCHEL, *supra* note 126, at 320 ("If the wood fiber in all the books and papers written about the original Mount Laurel decision were converted into construction materials, it would conceivably amount to more low-income housing than was built as a result of the decision."). Recall, of course, that Fischel supports privatization of zoning rights. *See id.* at xiii.

masters and technical experts could make the judicial role more effective.[416] Far more importantly, however, as in the case of *Roe v. Wade*[417]—arguably the most famous "legislative-type" opinion—if, as a last resort, courts do not reach out to protect individual rights, then who will?[418]

There are, of course, also weak court decisions that perpetuate the anticommons.[419] But without allowing active judicial review, even courageous judges like Hall and Dwyer would have no avenue to defend the public's rights. In the end, judicial review can serve as a fundamentally counter-majoritarian check on legislative and agency power. As Farber and Frickey point out: "[d]emocracy cannot be equated with pure majority rule, because pure majority rule is incoherent. Rather, a viable democracy requires that preferences be shaped by public discourse and processed by political institutions so that meaningful decisions can emerge."[420] Put more simply in the words of Justice Wilentz in *Mount Laurel II*, judges "may not build houses, but we do enforce the Constitution."[421]

2. *The Public/Private Distinction and Pusblic Oversight*

While courts can help fight the anticommons, a stronger weapon is greater civic participation and input. Richard Stewart even suggests a rethinking of democracy as the only solution to curing the ills of administrative law:

> The only conceivable way out of the labyrinth would seem to be a new and comprehensive theory of government and law that would successfully reconcile our traditional ideals of formal justice, individual autonomy, and responsible mechanisms for collective choice, with the contemporary realities of decentralized, uncoordinated, discretionary exercises of governmental authority and substantial disparities in the cohesiveness and political power of private interests.[422]

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[416] *See, e.g.*, HAAR, *supra* note 97, at 138.

[417] 410 U.S. 113 (1973).

[418] *See also* HAAR, *supra* note 97, at 137 ("To claim that constitutional rights must be the prisoners of procedural technology fashioned for other forms of litigation is a form of willful ignorance.").

[419] *See, e.g.*, Poletown Neighborhood Council, *supra* notes 183–84; State Street Bank & Trust v. Signature Financial Group, *supra* note 75.

[420] FARBER & FRICKEY, *supra* note 112, at 61–62.

[421] S. Burlington County NAACP v. Township of Mount Laurel, 456 A.2d 390, 490 (N.J. 1983).

[422] Stewart, *supra* note 165, at 1807. Morris Cohen also argues:

While this might be an ideal to aspire to, our current bureaucracies are unlikely to be replaced by a participative democracy overnight. We must first take steps to understand the reasons why the polity often disengages from issues of public policy.

Perhaps the greatest obstacle to achieving public participation is the stubbornness of the public/private distinction. Grossly oversimplified, the idea is that citizens should concern themselves with their private lives and businesses, and—except perhaps for voting every few years[423]—not participate in public life. Rooted in a nineteenth century ideal of separating public and private law,[424] it symbolizes the "inherent conflict between individualism and collective control that informs the liberal perspective . . . ."[425]

The public/private distinction has historically been used to justify very bad policy. *The Civil Rights Cases*[426] struck down a Reconstruction-era statute barring discrimination on the theory that:

> It would be running the slavery argument into the ground to make it apply to every act of discrimination which a person may see fit to make as to the guests he will entertain, or as to the people he will take into his coach or cab or car, or

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> To the profounder question as to what goods are ultimately worthwhile producing from the point of view of the social effects on the producers and consumers almost no attention is paid. Yet surely this is a matter which requires the guidance of collective wisdom, not to be left to chance or anarchy.

Cohen, *supra* note 83, at 30. *See also* Gerald E. Frug, *The City as Legal Concept*, 93 HARV. L. REV. 1057, 1129 (1980) ("Instead, our refusal is a political choice, a choice for organizing our social life by means of technical hierarchy rather than democratic control.") [hereinafter Frug City Article]. For a discussion of how legal doctrines perpetuate administrative bureaucracy, see Gerald E. Frug, *The Ideology of Bureaucracy in American Law*, 97 HARV. L. REV. 1276 (1984).

[423] Which many do not even do.

[424] *See, e.g.*, Morton J. Horwitz, *The History of the Public/Private Distinction*, 130 U. PA. L. REV. 1423, 1424 (1982). Horwitz writes:

> [O]nly in the nineteenth century was the public/private distinction brought to the center of the stage in American legal and political theory. . . . One of the central goals of nineteenth century legal thought was to create a clear separation between constitutional, criminal, and regulatory law—public law—and the law of private transactions—torts, contracts, property, and commercial law.

Id.

[425] Karl E. Klare, *The Public/Private Distinction in Labor Law*, 130 U. PA. L. REV. 1358, 1422 (1982).

[426] 109 U.S. 3 (1883).

> admit to his concert or theatre, or deal with in other matters of intercourse or business.[427]

Lochner struck down a state labor law on the theory that the "statute necessarily interferes with the right of contract between the employer and employés, concerning the number of hours in which the latter may labor in the bakery of the employer."[428] Gerald Frug has even explored the public/private distinction as a principal culprit behind the powerlessness of cities.[429]

Despite its instrumental use, the public/private distinction cannot withstand critical scrutiny. Early twentieth-century legal realists were the first to point out that the very concept of private property is only meaningful in relation to public enforcement of rights.[430] Today, it is hard to find a private function that does not have a public counterpart, and vice-versa.[431] Comparing *Bowers v. Hardwick*[432] to *United States Dept. of Transp. v. Paralyzed Veterans of America*,[433] Alan Freeman and Elizabeth Mensch have aptly noted, "that which seems at the experiential level most private—sex—is declared public, while that which seems

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[427] *Id.* at 24–25. Justice Harlan, in dissent, rightfully asks whether "the management of places of public amusement is a purely private matter, with which government has no rightful concern." *Id.* at 42 (Harlan, J., dissenting).

[428] Lochner v. New York, 198 U.S. 45, 53 (1905). In dissent, (the second) Justice Harlan argued: "I take it to be firmly established that what is called the liberty of contract may, within certain limits, be subjected to regulations designed and calculated to promote the general welfare or to guard the public health." *Id.* at 67 (Harlan, J., dissenting).

[429] Frug City Article, *supra* note 422, at 1099–1120.

[430] *See, e.g.*, Cohen, *supra* note 83, at 21 ("To be really effective, therefore, the right of property must be supported by restrictions or positive duties on the part of owners, enforced by the state as much as the right to exclude others which is the essence of property.").

[431] For example, the provision of traditional public services have often become privatized—security guards, utilities, letter couriers, jails, and the like. Charles Haar points out the functional equivalence of private and public land use restrictions. *See* HAAR, *supra* note 97, at 201. Gerald Frug has argued the futility of attaching the labels of public and private to corporate property. Frug City Article, *supra* note 422, at 1130. Frug points out:

> [I]f corporate assets are not the shareholders' private property, they are certainly not the property of corporate executives or directors. Since no human owner can be found, the corporation itself seems the only possible candidate to be the owner of corporate property. And if that is true, all corporations, including "public" corporations [such as cities], can be seen as owners of private property.

Id.

[432] 478 U.S. 186 (1986) *overruled by* Lawrence v. Texas, 123 S. Ct. 2472, 2484 (2003). In *Bowers*, the Supreme Court had ruled that the state of Georgia could criminalize consensual sodomy.

[433] 477 U.S. 597 (1986). Here the Supreme Court decided that airlines do not need to comply with the Rehabilitation Act of 1973, applicable to recipients of federal financial assistance, despite federal subsidies to the air traffic control system.

most public—air traffic—is declared private."[434] Gerald Frug has noted the particular problems of relying on the public/private distinction in administrative law where agencies "represented the merging of concepts of public and private into the idea of expertise."[435] Duncan Kennedy laments that "one simply loses one's ability to take the public/private distinction seriously as a description, as an explanation, or as a justification of anything."[436]

Directly relevant to government largesse, Alan Freeman and Elizabeth Mensch have observed that:

> The legal literature is filled . . . with theoretical invocations of public welfare, used to justify . . . what are merely hierarchical property relations.
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> . . . .
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> . . . Conventional free-market ideology extols the virtues of private capital accumulation, entrepreneurial skill, and the harsh reality of risk. Yet tax breaks are granted to entice industries to invest or remain in localities. Cities compete for the opportunity to sprovide sports teams with ever more luxurious stadiums. Huge companies get government help when they face financial ruin. Private companies rarely turn down the opportunity to feed greedily at the public trough.[437]

Note how seriously the public/private distinction is harnessed to defend freedom of contract, and how it magically disappears in the context of regulatory givings. Once this legal sleight of hand is recognized, new mechanisms to forestall the anticommons emerge.[438]

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[434] Alan Freeman & Elizabeth Mensch, *The Public-Private Distinction in American Law and Life*, 36 BUFF. L. REV. 237, 250 (1987). *But see* Robert H. Mnookin, *The Public/Private Dichotomy: Political Disagreement and Academic Repudiation*, 130 U. PA. L. REV. 1429, 1440 (1982) ("Is your rejection total, or is your disagreement really limited to the attempts to characterize economic activities as private? Are you really closet liberals when the public/private dichotomy is used to defend autonomy in the sexual realm?").

[435] Frug City Article, *supra* note 422, at 1138–39.

[436] Duncan Kennedy, *The Stages of Decline of the Public/Private Distinction*, 130 U. PA. L. REV. 1349, 1357 (1982); *see also* Freeman & Mensch, *supra* note 434, at 248 ("It [the public-private distinction] can easily be turned inside out precisely because it has no logical content at all."); Henry J. Friendly, *The Public-Private Penumbra—Fourteen Years Later*, 130 U. PA. L. REV. 1289, 1291 (1982) ("If we now know more about the location of the border between public and private action, this is rather because the [U.S. Supreme] Court has pricked out more reference points than because it has elaborated any satisfying theory.").

[437] Freeman & Mensch, *supra* note 434, at 248–49.

[438] *Cf. id.* at 238 ("Once the public-private split is recognized to be merely an artificial construct, new possibilities for human contact are born.").

Publicizing government misbehavior[439] and greater public participation in agency decision-making via notice and comment rulemaking[440] seem simple first steps. More direct participation, such as the public's monitoring of agencies, much like shareholders monitor corporations, is a possibility.[441] Some commentators have proposed experimenting with the election of administrative agency members.[442] Others point to contexts where majorities should govern.[443] Some scholars even go so far as to suggest transferring a few profit-making businesses to government control.[444] Whether we want to adopt any of these solutions should be hotly debated, but the more important point is to have the civic debate.

The overarching challenge will be to find ways to motivate the public to participate in civic life. Mancur Olson's work on group behavior warns us that "[o]nly when groups are small, or when they are fortunate enough to have an

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[439] *See, e.g.*, Levinson, *supra* note 388, at 419 (arguing that bad publicity will affect governments who react to political, not financial, motives).

[440] *See, e.g.*, Krent & Zeppos, *supra* note 89, at 1771–72.

[441] *See id.* at 1770. Krent and Zeppos note:

> [R]evamping agency disposition practices is critical. Ideally, a monitoring scheme could mimic the market oversight mechanism of shareholders so as to prevent wasteful management and the siphoning off of revenue to particular interest groups. Agency managers would face the wrath of shareholders (or some type of analogue) for every botched deal or disclosed subsidy.

Id. Krent and Zeppos also propose greater agency oversight from Congress and the Office of Management and Budget (OMB). *See id.* at 1771.

[442] *See, e.g.*, Stewart, *supra* note 165, at 1790. Stewart also outlines how agency members could be appointed by private organizations. *See id.* The latter, however, would be particularly susceptible to the dangers of interest group representation, which Stewart himself acknowledges. *See id.* at 1801 (arguing that "obvious" dangers include "heightened conflict over policy choices leading to domination or deadlock; the fragmenting of governmental authority and responsibility; the impairment of administrative efficiency and impartiality; the erosion of government's ability to leady and innovate").

[443] *See, e.g.*, Dagan & Heller, *supra* note 45, at 595.

[444] For example, to combat city powerlessness, Gerald Frug suggests "transferring a portion of the banking and insurance industries to city control." Frug City Article, *supra* note 422, at 1128. For instance, there is evidence to suggest that competition from municipal cable companies leads private cable franchisees to lower their prices significantly. *See* FED. COMMUNICATIONS COMMISSION, IMPLEMENTATION OF SECTION 3 OF THE CABLE TELEVISION CONSUMER PROTECTION AND COMPETITION ACT OF 1992, STATISTICAL REPORT ON AVERAGE RATES FOR BASIC SERVICE, CABLE PROGRAMMING SERVICE, AND EQUIPMENT, FCC Doc. No. 02-107, MM Docket No. 92-266, at ¶ 37 (Apr. 4, 2002) (report on cable industry prices). Note also that during the California electricity debacle Los Angeles County, which has a municipal electricity provider, was one of the few areas unaffected by price gouging. *See, e.g.*, Janet Wilson, *Potential Cost of Utility Sparks Dispute in Irvine*, L.A. TIMES, Jan. 14, 2003, at B3; Tina Borgatta, *After Energy Jolt, Cities Think Small*, L.A. TIMES, May 26, 2002, at B1.

independent source of selective incentives, will they organize or act to achieve their objectives."[445] As a consequence, the "multitude of workers, consumers, white-collar workers, farmers, and so on are organized only in special circumstances, but business interests are organized as a general rule."[446]

Can we create small groups, or "selective incentives"? Richard Revesz has argued, for example, that having state and local regulation of the environment may be preferable from a public choice point of view since it allows smaller groups of citizens to operate at a grassroots level.[447] Is it too far-fetched, for instance, to contemplate offering tax incentives to citizens who fulfill greater civic obligations?

VII. CONCLUSION

Those who believe in economic competition and social diversity should occasionally be shocked by what the legal system permits: destruction of the natural environment, squelching of competition, and a civic life too often characterized by "alienation and *anomie*."[448] Perhaps we have allowed this to happen precisely because we do not yet fully understand the underlying mechanisms. This Article has attempted a first step in that direction.

When government bestows its largesse on a small number of economic or social actors—be they logging companies, license holders, or suburbanites—it unwittingly creates a right for these recipients to exclude the rest of us even though no property has changed hands. National forests are destroyed as logging companies enjoy below market stumpage fees. Innovative wireless technologies are stalled in favor of incumbents' running infomercials. The urban core degenerates thanks to subsidized suburban sprawl. In each case, regulatory givings create an anticommons.

Once identified, using conventional tools to analyze and address the problem is often unproductive. Public choice theories are incomplete, and critiquing the so-called "public interest" doctrine provides limited analytic insight. Emphasis on "public" and "private" polarities, to which the overwhelming majority of commentary is devoted, is unsatisfying. Privatization ignores transaction costs, fairness, and human behavior. The commons is prematurely utopian. More importantly, these proposals are so philosophically different, that the current debate offers little hope for shared ground.

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[445] OLSON, *supra* note 118, at 167. "Selective incentives" can be thought of as by-products of a group's main purpose, such as professional organizations offering insurance and technical publications to their members. *See id.* at 132–39; *see also supra* notes 118–20.

[446] OLSON, *supra* note 118, at 143.

[447] *See* Richard L. Revesz, *Federalism and Environmental Regulation: A Public Choice Analysis*, 115 HARV. L. REV. 553 (2001).

[448] JACKSON, *supra* note 3, at 272.

Even though the problems are difficult,[449] they are not intractable. Provided we are willing to refocus the debate, there are ways to regulate without giving the public's house away. We can set real consumer welfare as a goal, modernize the public trust doctrine, and experiment with liability rules. We can fight for greater judicial oversight and redefine the artificial barriers that separate private from public participation. But little is possible if we are not able to recognize the problem. If this Article can at least make commentators and regulators pose themselves two questions before a proposing a regulation—(i) is this a giving? (ii) does it create an anticommons?—then it will have accomplished its goal. If it can refocus the debate toward realistic solutions, even better.

[449] As Richard Stewart points out, "[b]ecause it is so directly concerned with reconciling government power and private interests, administrative law is peculiarly vulnerable to the intellectual and social pressures resulting from the juxtaposition of frayed ideals and current realities." Stewart, *supra* note 165, at 1813.